THE

LARYNGOSCOPE.

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To the Readers of THE LARYNGOSCOPE:

Many of the foreign general and special medical journals continue to be issued at irregular intervals, with very meagre contents, and some of those that had temporarily suspended publication seem not yet to have revived. In those that continue either steady or sporadic publication there has, in the past year, sprung up a considerable literature relating to oto-laryngologic surgery from bullet, shrapnel and other wounds sustained in war. In the compilation of the present Index Medicus we have tried to have the bibliography in this field of surgery as complete as circumstances would permit.

The amount of American oto-laryngologic literature is as large as ever and hence it has compelled us, because of lack of space, to curtail the subject-matter in our abstract department.

We again invite our readers to send us any suggestions or recommendations tending towards the improvement of the Index Medicus.

Very respectfully,

PHILIP FRANK,
Assistant Editor.

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NOTE.—All titles marked with a * are abstracted under their respective numbers in the second section. All articles marked with a † have appeared as original papers in THE LARYNGOSCOPE. All articles marked with a § have been abstracted in THE LARYNGOSCOPE.

I. NOSE AND NASO-PHARYNX.

Septum.

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DIGEST OF OTO-LARYNGOLOGY.

12

Normal Nasal Septum and the Pathology of Deflections. F. O. Lewis, *New York Med. Jour.*, April 10, 1915.

There are three forms of deflections that the author calls attention to because of their difficulty of correction, and their local and constitutional symptoms: (1) deviation of the quadrilateral cartilage resulting from trauma in such a manner that the convexity of the deformity obstructs one side of the nose, and the free edge, by projecting into the opposite nostril, partially or completely obstructs the other side (with compensatory hypertrophy of the inferior turbinate); (2) deflection of both of the cartilaginous and bony septum extending from within the vestibule almost to the posterior nares, impinging against the inferior turbinate, interfering with drainage and ventilation and associated with Eustachian catarrh and middle-ear deafness; (3) deflection of the vertical plate of the ethmoid, impinging against the middle turbinate giving rise to reflex symptoms (headache, neuralgic pains, cough, asthma). P. F.

13

Transplantation of Cartilage in the Correction of Septal Deformities. F. O. Lewis, *Ann. Otol., Rhinol., and Laryngol.*, Sept., 1915.

The indications for cartilage transplantation are: (1) inevitable perforation during the submucous operation; (2) small septal perforations regardless of the cause; (3) deviation with displacement of the cartilaginous septum requiring complete removal of the free end of the quadrilateral cartilage.

To avoid the objectionable symptoms following perforation the following method is recommendable by the author: In performing a submucous resection a portion of the quadrilateral cartilage which has been found necessary to remove is taken out in as large a piece as possible. This is washed and placed in sterile salt solution and after the completion of the operation if it is found that both sides of the mucous membrane have been penetrated or injured by removing pieces of bone, a piece of the cartilage is trimmed by means of scissors to the proper size and introduced between the two surfaces of mucous membrane. Both sides of the nostril are then packed tightly with gauze, being careful to see that the cartilage is in its proper position and th mucous membrane not curled upon itself. In about twelve hours the packing is carefully removed. The patient should be seen daily for four or five days in order that the position of the cartilage may not be altered and that the surfaces of the mucous membrane are kept clean because if infection occurs the cartilage is rapidly destroyed. Therefore, if infection is suspected free drainage is necessary and if instituted promptly the life of the cartilage is not impaired. The patient should not blow his nose but should snuff his secretions through his mouth. No washes or douches need be prescribed.

The method has been used by the author in twelve cases, all of which have entirely healed with no signs of perforation remaining. P. F.

24

The Inferior Turbinate. J. O. CAVANAUGH, *Ann. of Otol., Rhinol. and Laryngol.*, Sept., 1915.

The author details the anatomy, physiology and histology of the inferior turbinates, mentioning some original observations and measurements, and states that these bodies are deserving of more recognition because they mean more to the human economy than most rhinologists would have us believe. In the author's opinion there are three types of turbinates which attract attention, excluding the malignant and non-malignant tumor types. These are (1) the intumescent, (2) hypertrophy of the mucous membrane, and (3) hypertrophy of the bony part, the mucous membrane being practically normal. It is only exceptionally that an inferior turbinate should be totally removed and the author does not agree with those who advocate its removal and preserving the septum. A turbinate, even though it may look pathologic, will always have some function and should be left untouched. The septum should be the point of attack if by so doing we can preserve a turbinate and accomplish our purpose. Where operation on the turbinate is indicated, the author recommends an operation similar to those of Freer and Yankauer. If the entire membrane is at fault, whether it be intumescence or hypertrophy, cocainize and adrenalize (10 per cent cocain; 1:1000 adrenalin) and make an incision from behind forward at the lower and internal surface down to the bone, then a corresponding incision on the lower and outer side. With a Freer sharp elevator elevate the mucous membrane from the bone on the outer and inner side for one-eighth of an inch from the anterior surface all along the long axis of the turbinate; then, with a Myles alligator forceps, bite out a part of the bone with the triangular mucous membrane area. Now draw the cut edges together, but there should be no tension on the sutures, and suture with silk. Place a piece of cotton or gauze on the under and inner side to aid the tissues in remaining in opposition. Remove in twenty-four hours. P. F.

29

Inferior Turbinate Operations and the Rational Cure of Hypertrophic Rhinitis. GIUSEPPE LEALE, *Boll. d. Mal. dell'Orecchio*, V. 33, No. 9, Sept., 1915.

The author is of the opinion that in all cases in which the hypertrophic rhinitis is of moderate grade and of the vasomotor type simple cauterization of the mucosa is effective; but where the hypertrophic rhinitis is advanced and gives rise to symptoms of obstruction to breathing operative interference is indicated. P. F.

41

Adenoids in General Practice. DR. J. D. PAGE, *Bulletin Medical*, Nov., 1915.

The writer aims at indicating to the general practitioner the points which should guide him in deciding when the proper moment has arrived for the intervention of the specialist. He notes the large number of cases demonstrated at the anti-tuberculosis exposition, where

adenoid vegetations were present, and where the nose had become for the moment, a useless ornament, and the necessity which this observation imposes for the regular practitioner to school children. The pathology, symptoms, and diagnosis of adenoid vegetations are briefly sketched.

Under the head of treatment, the writer points out that many fewer cases would come to operation if the general practitioner would make an early diagnosis, and proceed, by establishing better hygiene, and a maximum of nutrition combined with the administration of syrup of the iodide of iron and codliver oil.

In addition, an endeavor should be made to keep the nose free by warm vapors and, if necessary, by irrigations. Again, the habit of nose breathing should be stimulated by training the child to keep the mouth shut, and, if necessary, by applying a bandage around the chin during the night. Operation should be advised when it has become impossible to secure nasal breathing, or when a complication such as acute otitis has supervened. WIERART.

49

Pollen Therapy in Hay Fever. J. L. GOODALE, *Ann. of Otol., Rhinol. and Laryngol.*, June, 1915.

In the first period 13 patients gave positive reactions to one or more of the following plants: coltsfoot, dandelion, white maple, willow, alder, birch, hawthorne, apple, lilac, oak, tulip, lily of the valley. In the second period (36 patients) the symptoms were ushered in with the flowering of the grasses. Disturbances from many garden flowers are of minor importance. The third period, Goodale has shown to be due in a great measure to the mid-season compositure, such as field daisy, hawkweed, yarrow, etc. The fourth period begins with the general flowering of ragweed, goldenrod, aster, etc., and lasts until frost.

The dosage is determined as follows: The special exciting pollen is first determined by the skin test. A second series of scratches are made at a distance from the first and different dilutions of the pollen extract in question are applied. It is important not to have this test applied near the skin reddened by the first tests because of the increased excitability of this region.

The dilutions may be made by adding some of the stock solution to alcohol of the same strength and a 25 per cent, 10 per cent, 1 per cent, or weaker dilution of the original extract are applied to a second series of scratches. The initial dose is determined by the dilution which does not excite a definite skin reaction. Not more than five or ten drops should be injected. The injections should be made at intervals of two days to a week, gradually increasing the dose a few drops at a time, and in the strength of the percentage. P. F.

53

Hay Fever; Its Treatment by Injections of a Solution of Ragweed Pollen. E. T. MANNING, *Jour. A. M. A.*, Feb. 20, 1915.

The definition that the author gives of hay fever, in accordance with our present understanding, is that it is an exudative catarrh of the

conjunctival, nasal and tracheobronchial mucous membranes, as the result, in sensative individuals, of the sensitizing anaphylactic action of the pollen of certain plants. The best explanation of the action of the pollen in hay fever is, in the author's opinion, that of Koessler who attributes the disorder to conditions of the mucous membrane which interfere with its normal digestive capacity of the foreign protein which, therefore, enters the system and sensitizes the local tissue. Manning states that there are two ways in which to treat the disease on the basis of this theory. One is to combat the disease by adding some substance to the organism capable of neutralizing the poisonous radical of the protein (passive immunization). The other is to develop within the organism a substance which will neutralize the action of the poisonous radical (active immunization). Manning employed, in his experiments, a modified Koessler technic. Ten milligrams of pollen from each variety is triturated with sterile silicon in an agate mortar. Twenty cubic centimeters of a sterile salt solution ten times stronger than a physiologic is then gradually added and thoroughly shaken. The suspension is placed in the incubator for twenty-four hours and again shaken. The mixture is then centrifugalized and the supernatant fluid pipetted off. This solution is a dilution of 1:1000 and all ohers are prepared from it.

The unit of pollen toxin used was the amount of portein contained in 1/100000 grams of pollen.

The experiments were made on twenty-one cases. Fourteen of them were objectively and subjectively relieved. In the other seven the treatment was incomplete, but four of these reported that their attacks were considerably lighter.

The immunity conferred is, however, of brief duration and while it is difficult to say what constitutes a cure, the impression that the author has obtained from his work is that the distressing symptoms were decidedly ameliorated. P. F.

56

Pollinosis (Hay Fever); Consideration of Its Treatment by Active Immunization. S. Oppenheim and M. J. Gottlieb, *New York State Jour. Medicine*, May, 1915.

The antigen which the authors have developed for curative purposes was prepared as follows: The pollen was ground up for several days with sand and a sufficient amount of 5 per cent sodium chlorid solution and 0.5 per cent phenol added to prevent bacterial growth. The mixture was placed in the incubator for 72 hours and then filtered by suction. The filtered extract was then precipitated with absolute alcohol (eight parts) and filtered (in a Buchner filter). The precipitate was dried and weighed. This precipitate did not give the biuret or ninhydrin reactions. It is partly soluble in 0.85 per cent. NaCl solution and physiologically active in very weak solutions. The dried precipitate was dissolved in 0.85 per cent NaCl solution, 0.25 per cent phenol added, and serial dilutions made.

Of eleven patients treated five were cured for the season. In four there was marked improvement. Of the two patients who were not at all benefited one had polypoid degeneration of the middle turbinate

with bone necrosis and the other patient (a physician) reacted both to ragweed and goldenrod pollen. He received alternating injections of the ragweed and goldenrod extracts but he could not develop a tolerance.

The authors recommend that treatment had best be undertaken about ten weeks before the first attack is expected to occur and regularity of attendance at weekly intervals is important. Beginning with from one to five units of pollen extract the dose is gradually increased until a local reaction appears at the site of the injection. This dose is continued until the patient no longer shows any reaction. Then the dose is gradually increased again. A unit of pollen extract is the amount of antigen dissolved in one cubic centimeter of extract at a dilution of from 1 to 20 millions. P. F.

73

Changes in the Pituitary in a Case of Lympho-sarcoma of the Nasopharynx. G. BASILI, *Zeitschr. f. Laryngol.*, Bd. 7, H. 6, Sept., 1915.

The lympho-sarcoma was of the small, round cell variety. The patient was a man, 36 years old, who presented the psychic syndrome described by Citelli. At autopsy the pituitary was found greatly enlarged. Microscopic examination of the pituitary showed a marked increase in size and number in all the cells. Capillaries were dilated and filled with blood and celloid substance. Treating the preparation by Ciaccio's method and staining it with Sudan III, a large quantity of cellular liquid could be demonstrated in the pituitary. Both the increase in eosinophil cells and cellular lipoid, Basil regards as an expression of hyperfunction. The findings are identical with those obtained by Citelli in studying the effect of adenoids on the pituitary gland. P. F.

99

The Treatment of Scleroma of the Upper Air Tract with Auto-vaccines. J. BRUNNER and C. JAKUBOWSKI, *Arch. f. Laryngol.*, Bd. 29, H. 2, 1915.

The authors give a short, historical account of the advancements regarding the question of scleroma of the upper air passages and their own observations on the anatomical pathology of the disease. The auto-vaccine prepared by the authors was injected subcutaneously. No serious general reactions were noted. Very good results were obtained in a number of cases by means of the vaccine, provided the disease was not of too long standing. The disease was arrested and the infiltrations either disappeared altogether or became greatly reduced in size. The author urges that the disease be regarded as an infectious disease and as such it should be under state regulation. P. F.

137

The Etiology and Treatment of Ozena. HENRY HORN, *Jour. A. M. A.*, Aug. 28, 1915.

Horn reports six cases treated with the Perez vaccine and the results obtained tend to show, he believes, although they do not prove, the great value of the remedy in the treatment of ozena. He describes the method of preparing the vaccine and he states, also, that several of

the stock vaccines on the market have been used with advantage. These vaccines usually contained the Friedländer bacillus. The micrococcus catarrhalis, the pneumococcus and streptococcus, and this may raise the question whether there are not types of ozena closely resembling that due to the Perez bacillus, but caused by other organisms, or whether ozena is not a mixed infection. His conclusions are: (1) The coccobacillus foetidus ozenae, Perez, as isolated by Hofer, has fulfilled all the bacteriologic requirements necessary to establish its identity as the etiologic factor in ozena; (2) the isolation of this organism is attended with considerable difficulty; (3) the production of agglutriating serum in rabbits is an exceedingly difficult task; (4) the preparation of autogenous vaccines in every case is very difficult, if not impossible; (5) at present mixed vaccines made from various strains of Perez bacillus is the most practical method of treatment now available; (6) it may be necessary to precede or combine with the treatment the vaccines made from the organisms which are usually present in combination with the Perez bacillus; (7) it is possible that there may be two or more types of ozena bacteriologically different but clinically identical. P. F.

139

Complement Fixation in Acute Rhinitis. K. Howell, *Jour. Infect. Dis.*, May, 1915.

Using the bacillus rhinitis as antigen, Howell obtained complement fixation with the serums of persons affected with rhinitis and of persons injected with the bacillus after it has been killed by heat. The period of fixation is short but it is most marked a few days after the onset of the infection. Control tests with serums of normal persons and of patients with other infections were negative with the bacillus rhinitis. Further proof of the specific relationship that the bacillus bears to acute rhinitis is shown by the fact that complement fixation is obtained when the serum is tested with suspensions of other bacteria presumed to be closely associated with rhinitis if not the actual cause of the condition. P. F.

143

Total Rhinoplasty; Report of a Case. R. H. Johnston, *Amer. Jour. Surg.*, April, 1915.

The patient had his nose entirely severed by being drawn up against a revolving saw. The lower lip was cut off to the lower border of the maxilla and the upper lip was also cut through. The operation performed was as follows: A piece of cartilage from the left eighth rib was removed and slipped beneath the periosteum according to Carter's method, a little above the center of the left forehead. Three months later the skin on the two sides of the remains of the nose was dissected up and the flaps, skin surface down, were turned into the facial opening and sutured in the middle line. The flap for the formation of the nose began at the inner end of the eyebrow and continued up to the hair line and across the forehead to the end of the transplanted cartilage. From above the left eyebrow to the lobe of the nose

it was bent downward and inward. The next step in the operation consisted in dissecting away the skin from the periosteum up to the cartilage which was also removed from the bone with its strip of periosteum. The flap was then turned down raw surface below, and the upper end of the cartilage was stiched to hold it firm. The lower end was sutured into an incision at the upper lip so that the nose would project from the face. P. F.

154

The Early Recognition of Cancer of the Upper Air Passages. EMIL MAYER, *Amer. Jour. Surg.*, July, 1915.

The author points out the necessity of viewing with suspicion the so-called innocent intranasal growths. These have a tendency to undergo malignant metamorphosis. In the nose, cancer often springs from one of the turbinates; but in most instances the neoplasm is deep-seated with its origin in one of the sinuses, especially the antrum of Highmore. In the mouth, the most frequent site of malignant growth is on the tongue and as leucoplakia buccalis is often a forerunner of malignancy any induration of the tongue should be viewed with suspicion. The author calls attention to the advantages of the naso-pharyngoscope in the determination of the location and size of post-nasal new growths. Cancer of the larynx has its favorite site on one vocal or false cord. In the early stages it is limited to one-half of the larynx and its early recognition is imperative because its complete removal is possible and the results are gratifying. In a case of cancer of the epiglottis, mentioned by Mayer, there has been no discomfort following removal of the epiglottis and no recurrence in two and one-half years. P. F.

161

Rhinophyma; Its Etiology, Pathology and Treatment. W. MILLIGAN, *Lancet*, Sept. 18, 1915.

The author reports a case successfully treated by dissecting away the hypertrophied tissue followed by skin grafting. He does not believe that alcoholism or traumatism are etiological factors in rhinophyma. Histological examination of the diseased tissue shows marked thickening of the connective tissue of the corium with hyperplasia and cystic dilatation of its sebaceous glands. There also occurs deposit of fat between the various hypertrophied areas. As a result of these changes there is an elevation of the papillary layer of the true skin into projections of various sizes and shapes. A very marked feature of the histologic picture is the cystic dilatation of one or more of the sebaceous glands associated also with marked thickening and tortuosity of the arteries, veins and capillaries. P. F.

172

Headache Associated with Intranasal Disorders. L. HEMINGTON PEGLER, *Lancet*, Feb. 27, 1915.

Headache due to nasal causes may be classified into three groups; (1) simple or non-inflammatory group in which the headache is due to pressure within the nasal cavities by one piece of bone or cartilage

against another, the mucous membrane intervening. For example, a septal spine projecting against a middle or inferior turbinate and concealed by an anterior deflection of the triangular cartilage; (2) chronic inflammatory group in which there is simple degeneration and softening of bone in turbinate disease, polypi or polypoid degeneration with or without associated involvement of the mucosa of the accessory sinuses; (3) inflammatory group, in which the headache is associated with various forms of rhinitis. P. F.

205

Gonorrheal Infection of the Upper Respiratory Tract in Adults. JOHANNES ZANGE, *Zeitschrift f. Ohrenheilkunde*, Bd. 73, H. 3, Nov., 1915.

A noted surgeon, 40 years old, while operating on a patient for gonorrheal phlegmon was struck in the face by some of the pus. The surgeon merely wiped his face and continued to operate. Three days later he developed a left conjunctivitis and the following day a right conjunctivitis, which yielded to treatment with 10 per cent solution of protargol. Microscopic examination showed a pure culture of gonococci. Three days after the appearance of the conjunctivitis the patient complained of difficulty in swallowing and pain in the pharynx. A swab from the pharynx showed numerous, and many intracellular, gonococci. Nasal examination the same day showed pus, more profuse on the right side than on the left, issuing from the naso-lachrymal duct. Throat examination showed a thin layer of pus covering the fauces and the posterior pharyngeal wall. Abundant gonococci were present in the pus from the nose and in the pharynx. No other organisms could be demonstrated.

In the course of the next six days the symptoms increased in severity, the infection involving the larynx and the Eustachian tube. Shrapnel's membrane and the malleus on the left side were reddened and laryngeal examination showed the whole hypopharynx, the epiglottis and the laryngeal ventricle deeply red and covered in places with pus. The vocal cords were deeply injected and edematous.

In none of the affected parts did erosion or ulceration occur. The infection gradually yielded after about fourteen days to local treatment four or five times a day with 5 per cent solution silver nitrate and 2 per cent protargol solution.

The hoarseness lasted eight days. Otherwise there were no after effects. P. F.

212

The Late Results of Cleft-palate Operations. T. W. BROPHY, *Surg., Gyn. and Obst.*, Jan., 1915.

The operation for cleft-palate, when performed in early infancy, brings into action the muscles of the palate and the muscles develop instead of becoming atrophied for want of use. If the operation is delayed the muscles cannot as surely be made to subserve the same purpose as the tissues which develop through natural development and the development of the muscles is proportional to that of other tissues. Again, if the operation is performed early there is much less deformity in the bony as well as in the soft tissues.

When the operation is performed in late infancy, when the child is from six to twenty-four months of age the conditions are a little different, because the tuberosities of the maxillary bones still remain widely separated and the posterior part of the cleft consequently will also be widely separated. As the patient grows older the difficulties increase. The arch is broader and remains broader. The wider the cleft the shorter the velum and, therefore, the soft palate does not approach the posterior pharyngeal wall as it normally should. Phonation is not as clear unless the pilato-pharyngeal muscles are in part utilized to lengthen the velum. P. F.

232

Appendicitis as a Sequela of Tonsillitis. H. B. ANDERSON, *Amer. Jour. of the Med. Sci.*, Vol. CL., No. 4, p. 541, Oct., 1915.

After referring to the importance of the tonsils as portals of entrance for numerous and varied infections, the author credits Kelynack with first directing attention to the occurrence of appendicitis secondary to tonsillitis. A long study of the subsequent references to the subject follows. The author reports one case under his own observation and gives an account of several others from personal communications.

PACKARD.

238

The Proper Position of Tonsillectomy in Pediatrics. SANFORD BLUM, *Archives of Pediatrics*, Nov., 1915.

Thinks tonsillectomy done too frequently and is of more benefit in older than younger children. Discusses conditions it is most often done for.

1. Rheumatism. Not certain as to its exact cause and nature and why should essential organs be removed for theory?

2. Endocarditis. Rare condition in children anyway. "In no single case of endocarditis has it, as far as I am aware, been positively proved as emanating from the tonsil."

3. Chorea. Etiology unknown. Knows of two previously healthy children who subsequently developed chorea after removal of the tonsils.

4. Enlarged cervical glands. The author's experience has seen no benefit from tonsillectomy in these cases. Thinks that the tonsil is an excretory organ for the cervical glands and the tubercle baccilli found in them are not in them as infective agents but rather as waste products from the cervical glands.

In the author's opinion, if a child can be gotten safely over his sixth or seventh year with conservative treatment, he will not probably ever require tonsillectomy. Children over eight years who have their tonsils are heavier and healthier as a rule than those who do not.

The author thinks tonsils should be conserved for the following reasons:

1. Not superfluous if nature put them there. 2. Combat infection. 3. Possible internal secretion. 4. Eliminative organs for waste products of dentition. 5. Eliminative organs for systemic diseases. 6. Modulate the voice. 7. Moisten the food and possibly throw out a digestive ferment. 8. Take up foreign matter from nasal mucous membrane. 9. Author thinks they are excretory organs for cervical glands.

PACKARD.

239

Tonsil, Excretory Organs for Cervical Glands. SANFORD BLUM, *Archives of Pediatrics*, Nov., 1915.

Injected chemicals into cervical glands not found normally in cervical glands or tonsils, and recovered them in the tonsils and in the mouth.

PACKARD.

258

Effects of Tonsil Extract on the Blood Picture. C. B. FARMACHIDIS and A. VATTUONE, *Policlinico*, No. 3, March, 1915.

Tonsil extract increases the number of both the red and white blood corpuscles. It possesses a glycolytic action, and is also able to counteract the fatal toxic action of epinephrin. P. F.

263

The Tonsils and Cervical Adenitis. H. GARDINER, *Lancet*, Oct. 2, 1915.

The author's investigation was carried out to determine what evidence there was bacteriologically of the infectivity of the tonsils in cervical adenitis, in the absence of any other possible source of infection. Organisms were found in 80 per cent of the cases, as follows: Micrococcus catarrhalis, 7 cases; staphylococcus, 5 cases; pneumococcus, 7 cases; streptococcus, 7 cases; bacillus coli communis, 2 cases; bacillus tuberculosis, 4 cases; bacillus of Friedländer, 1 case. The conclusions reached by the author are: (1) In the majority of cases (80 per cent) of chronic cervical adenitis where no obvious source of infection is present the tonsils are infected; (2) the size of the tonsils makes no difference as to their infectivity, except that the small fibrous tonsil is likely to be more dangerous than the large; (3) the number of cases showing the presence of tubercle bacillus is relatively small but is larger than in simple cases of enlarged tonsils; (4) the frequent presence of other organisms suggests that a large proportion of so-called chronic tuberculous glands are in reality chronic septic glands; (5) as the organisms are present in the deepest parts of the glands they are removable only by complete enucleation of the tonsils. P. F.

274

Tonsillar Spots in Measles. CHARLES HERMAN, *American Journal of Diseases of Children*, Oct., 1915.

The author describes tonsillar spots in measles.—The patients must be seen early and the spots must be looked for. A good view of the tonsils is necessary. Spots vary in number from 2 to 30, in size from point to head of pin, in shape from regular or irregular streaks, 2 to 3 mm. in length, to round spots, in color from bluish grey to white. They last from one to three days. They are less valuable for diagnosis than the Koplick spots since they are present in only about 40 per cent of cases and because their appearance is not always characteristic sometimes hard to diagnose from follicular tonsillitis. They may be valuable in making an early diagnosis in an epidemic for purposes of isolation. The spots are frequently present when the patient has no other objective symptoms except rise in temperature. T. H. HALSTED.

277

Tonsillectomy by Blunt Dissection Under Local Anesthesia. JAMES B. HORGAN, *Jour. Laryngol., Rhinol. and Otol.*, Dec., 1915.

The following is Dr. Horgan's technique: Fifteen minutes before the operation the patient is given a hypodermic of morphine sulphate 1/4 and atrophine sulphate 1/120. The fauces are first anesthetized superficially by the application of 10 per cent cocain together with a few drops of adrenalin. By means of a sufficiently long syringe up to 15 c.c. of novocain solution are injected around each tonsil (two tablets of novocain to 30 c.c. sterile normal salt solution. After the pillar has been drawn aside by any suitable forceps the tonsil is grasped with a tonsil volsellum forceps and by maintaining firm inward tension the plica will be put on the stretch and little difficulty will be experienced in splitting it with the dissector. The dissector should first be worked in an antero-posterior direction, after which by a strong upward sweep of the instrument the upper pole of the tonsil is cleanly and totally evulsed. The lingual pole of the tonsil may be divided by a suitable scissors or a snare. As soon as it is ascertained that all hemorrhage has ceased a small quantity of equal parts of iodoform and boric acid is insufflated on the raw surface. After the operation the patient should be propped up in bed for six hours. Post-operative treatment consists of a peroxide spray or gargle. P. F.

289

The Post-operative Antiseptic Treatment of the Tonsillar Fossae. G. P. MARQUIS, *Jour. A. M. A.*, July 10, 1915.

This consists in applying 50 per cent tincture of iodin to the tonsillar fossae immediately after removal of the tonsils. P. F.

311

The Relation of the Tonsil to the Thyroid. D. ROMAN, *Jour. Ophthal., Otol. and Laryngol.*, July, 1915.

As distinguished from hypertrophy and hyperplasia there is a form of enlargement of the thyroid resembling simple goitre histologically in which the cellular proliferation is more of a type of inflammatory infiltration. The enlargement is symmetrical. The basis upon which the tonsils may be accused of being an etiological factor in which form of enlargement, which may be induced by direct infection, is the pharyngo-lingual origin of the embryonic thyroid from the fore-gut ventrally in the median line to the bronchial arches and the persistence of the ductus thyroglossus or the foramen caecum. The infection from the tonsil and peritonsillar region can be carried to the thyroid either by the blood stream or the lymphatics. However, no germ, in any of the cases studied by the author, could be isolated from the thyroid. This negative result might be due to one of two causes: (1) either by a chemical destruction of the bacteria by the thyroid secretion, or (2) that no actual bacterial invasion occurred, but only a toxic irritation or chemical stimulation to cellular proliferation. Out of 2,236 cases of thyroid disease the author observed this form of thyroid enlargement in 187 cases and nearly 80 per cent of these were in young people

between two and twenty years of age. Surgical treatment of the tonsils and adenoids produced rapid subsidence and resolution of the condition. P. F.

319

Primary Syphilis of the Tonsil. C. MORTON SMITH, *Journal of Cutaneous Diseases*, Oct., 1915.

Syphilis is more than a venereal disease as shown by the large number of accidental extragenital infections. Among accidental infections, chancre of the tonsil ranks, with different observers, from first to fifth in genital inoculation.

Chancre of the tonsil is usually unilateral and more frequently on the right side; males more than females. Kissing plays a most important part in primary syphilis of the tonsil. Drinking glasses, eating utensils, pipes, mouth pieces of wind instruments, nursing bottle nipples, cigars, cigarette stubs, tonsillotomes, Eustachian catheters, mouth to mouth insufflation of new born, have been reported as the mode of infection. Literature and Osler in his latest edition give prominence to "improper practices." Such, however, does not appear to be the author's opinion.

Symptoms.—Sore throat with swelling of tonsil followed by stinging pain on swallowing are first symptoms, a hard, usually painless, non-inflammatory enlargement of the gland under the angle of the jaw on the same side appears in from one to three weeks. On examination, tonsil is enlarged, of deep red color, pillars red and swollen, varying sized ulcer or erosion with dirty gray secretion or false membrane is seen on the tonsil. The crypts and follicles are ideal incubators for spirochetae. Chancre of the tonsil becomes decidedly indurated early in its course. Clinical findings should be verified by dark field and the Wassermann reaction.

Chancre of the tonsil should be considered in all sore throats, especially if unilateral, lasting over two weeks and failing to respond to treatment for simple angina. It must be differentiated from (a) Acute tonsillitis, (b) Peritonsillar abscess, (c) Vincent's angina, (d) Diphtheria, (e) Tuberculous ulcer of tonsil, (f) Malignant disease, (g) Mucous patch (secondary), (h) Gumma of tonsil (tertiary).

In all of these the behavior of the near-by lymph glands is most important in making a correct diagnosis:

In Peritonsillar—Difficulty in opening the mouth, uvula and median raphe are pushed to opposite side, fever, chill, foul breath and if glands are enlarged they are tender. Motion of jaws not limited in chancre. In Vincent's angina smears show short, thick spirochetae and fusiform bacilli. Diphtheria—Smears and culture verify—glands tender and painful. Malignant disease and tuberculosis—slow development, glands enlarge late. Gumma—No glandular enlargement. T. H. HALSTED.

337

Spirochetal Ulceration of Tonsils in Soldiers. W. WINGRAVE, *Lancet*, July 24, 1915.

The disease described by Wingrave, probably identical with Vincent's angina, may be divided into two groups: an acute, in which the disease lasts for about seven days, and a subacute, which lasts two or three

weeks. Vincent's spirochete (spirochete fetida) is the exciting cause. The condition is characterized by three symptoms: a deep, sloughing ulcer on one tonsil, fetid breath, the presence of spirochetes and fusiform bodies. Treatment consists in applying a 5 per cent solution of trikresol in alcohol to the ulcer accompanied by mouth washes of weaker solutions of the same antiseptic. P. F.

338

Vincent's Angina; A Review of the Present Position. W. WINGRAVE, *Jour. Laryngol., Rhinol. and Otol.*, December, 1915.

In practice, two distinct forms of Vincent's angina are met with: One which runs its course in a few days, another which persists for many weeks. Either form may present one or three local types: (1) Small multiple plaques which correspond with the lacunae of both tonsils; (2) solitary, unilateral, circumscribed patches showing slight edema and shallow ulceration; (3) solitary large, deep, irregular ulceration.

With but slight elevation of temperature and great depression, Vincent's angina may at first be mistaken for diphtheria, especially when the patches are bilateral. A culture will differentiate the conditions. Clinically, a patch in Vincent's angina does not show much increase in size and, if bilateral, never extends across the middle line and it remains fairly circumscribed. Vincent's patches are generally single and large, which differentiates them from ordinary lacunar tonsillitis.

The temperature and constitutional disturbances are markedly affected when the condition is associated with a pyogen such as the streptococcus. Glandular enlargement is rare except when there is supplementary pyogenic infection.

Two organisms, a spirochete and a fusiform body are accepted as essential to the diagnosis of Vincent's angina. The spirochete is larger and coarser than the pallida. The fusiform rod is sluggishly motile and appears as a straight or curved rod with tapering ends. At the equator there is an unstrained cleft. It is always thicker at the equator and it may occur singly or in pairs end to end. Both organisms are Gram negative.

The spirochetes are situated superficially, being confined either to the surface of the tonsil or to its crypts. They are not confined to the throat but may occur in the nose, the accessory sinuses, gums, decayed teeth, middle-ear, meningeal and cerebral abscesses, etc. They simply follow the death of tissue rather than precede or actually cause necrosis.

To demonstrate the organisms: (1) Fix the film by heat; (2) wash with acid alcohol; (3) stain with aniline gentian violet; (4) treat with iodin solution; (5) wash with acidulated water. Or, (1) fix film by heat; (2) quickly flood the slide with 5 per cent collargol solution. Drain the slide by standing it upright and then dry by placing it in an incubator for five minutes. Do not place over a flame as fissures will be formed, resembling spirochetes. The spirochetes are seen clear and unstained on a yellowish background. P. F.

341

Tonsillectomy as a Therapeutic Measure in the Treatment of Chorea and Endocarditis. J. H. YOUNG, *Boston Med. and Surg. Jour.*, Sept. 2, 1915.

In twelve out of twenty-one cases chorea occurred after tonsillectomy, which suggests that removal of the tonsils does not protect against this disease, and the always present possibility of endocarditis. P. F.

360

Paralysis of the Tongue from Traumatic Division of the Hypoglossal Nerves. MORESTIN. *Societe de Chirurgie de Paris*, June 23, 1915.

A soldier was wounded by a bullet which passed from one side to the other in the intrahyoid region with resulting complete paralysis of the tongue. There are no cocatrices and no induration and no disturbance of taste or tactile sensiblity of the organ. The tongue, however, takes no part in the act of swallowing solids and the patient has to throw his head back and push the bolus backward with his finger. Speech is interfered with but the patient can be understood fairly well. P. F.

364

Leukoplakia of the Tongue and Its Treatment by Radium. D. L. R. F. SIERRA, *Rev. Espan. de Urologia y Dermatolgia*, Aug., 1915.

The author considers the present standpoint of the etiology, symptomatology and histopathology of leukoplakia and reports the case of a thirty-five-year-old man in whom radium affected a complete cure. The radium, in the form of the bromide, was applied in a dose of 0.6 gm. for forty minutes at the first seance and for ten minutes during the subsequent seances. The treatment lasted forty days, after which time, cicatrization of the lesion was complete, the plaque and induration had entirely disappeared and the flexibility of the tongue returned. P. F.

369

Pathogenesis, Treatment and Prophylaxis of Mercurial Stomatitis. J. ALMKVIST, *Hygiea*, Vol. 77, No. 16, 1915.

The author has carried out extensive investigations on the origin of mercurial stomatitis and is of the opinion that the modus operandi of the causation of this condition is as follows: Local processes of decomposition within the mouth set free hydrogen sulphid; the hydrogen sulphid is absorbed by the blood in the superficial capillaries where it combines with mercury in the blood forming mercurous sulphid; the mercurous sulphid is deposited in the endothelium of the capillaries in the form of a granular deposit; as a result of this deposit the epidermis becomes degenerated, thus making a suitable medium for the bacteria present in the mouth, especially the bacillus fusiformis and the spirochete dentium, which bring about ulceration of the tissue. The sites of predilection are primarily the gums, the angle behind the last upper molar tooth and the tonsils. Secondarily affected are the tongue, the mucous membrane of the mouth and lips. Extension of the process downwards leads to loosening of the teeth from periostitis.

Treatment consists in the use of bichlorid and cyanid of mercury as antiseptics and of potassium permanganate and chlorate and hydrogen peroxid as oxidizing agents. P. F.

371

Leucoplakia; Its Pathogenesis and Treatment with Salvarsan. T. Baer, *Dermatologische Zeitschrift*, March, 1915.

This paper gives a very complete review of the literature of leucoplakia and a discussion of its causation, the author leaning more towards the syphilitic etiology of the disease. He reports in detail a case in which salvarsan proved of marked benefit. P. F.

386

Oral Tuberculosis. T. E. Carmody, *Ann. of Otol., Rhinol. and Laryngol.*, June, 1915.

Carmody's investigations show that the parts are affected in the following order of frequency: (1) Tip of tongue, (2) border of tongue and floor of mouth, (3) soft palate, anterior pillar and uvula, (4) dorsum and base of tongue, (5) lower jaw and gums, (6) upper jaw and gums, (7) lips, (8) hard palate, (9) salivary glands.

Ulcers may appear as fissures which, in the early stages, may be entirely overlooked, resulting from infection taking place either from the sputum or through the blood or lymph stream. These fissures may extend into the muscular substance of the tongue and yet show no surface extension except at the corner of the mouth. Ulcers appearing upon the lips, cheeks, surface, edge or tip of the tongue, usually exhibit a reddish base covered with granulation tissue upon which small whitish tubercles seem to be sown. The edges are irregular and may show some induration. A sharp-cut appearance of the edge is not usually found.

Ulcers of the gums begin at the gingival margin, usually around a decayed tooth or one having an artificial crown.

The soft palate is involved often when no other oral structure is affected. This occurs mainly by extension from pharyngeal and tonsillar tuberculosis and usually late in the disease.

The author suggests that there may be a difference in the mode of infection between lupus and tuberculosis and possibly a difference in the organism not shown in the tissues or in cultural characteristics by present laboratory methods. Lupus has little effect on the general nutrition and as a rule causes little pain.

Primary tuberculosis of the mouth must be differentiated from syphilis. Here the Wassermann reaction is of service and also the v. Pirquet test. The appearance of a chancre is that of a punched out ulcer with indurated base and showing no tubercles.

Epithelioma is differentiated from tuberculosis by induration of the edges as compared with the generally soft edges of the tuberculous ulcer. There may, however, be tuberculosis engrafted from epithelioma. Microscopic examination is the only absolute and reliable test. P. F.

396

Vincent's Angina. A. G. De Sanctis, *N. Y. Med. Jour.*, Nov. 6, 1915.

The author reports the case of a little girl ten years old who developed Vincent's angina after scarlet fever. The tonsil became covered with a

greenish white membrane which, when stripped off, left a raw, bleeding surface. Diphtheria was diagnosed and 10,000 units of antitoxin administered. This produced no change and smears made directly from the lesion showed the presence of the characteristic bacilli and spirella. Local application of tincture of iodin failed to improve the condition. Accordingly, 0.6 gm. neosalvarsan was given intravenously and from this time on the lesions became smaller and smaller until they finally disappeared.

Another case, in a man 42 years old, cleared up under potassium chlorate, three grains every four hours, in conjunction with mouth washes of the same drug. Diagnosis was corroborated by microscopic examination. P. F.

420

A Study of 250 Stained Blood Films in Pyorrhea Alveolaris. F. HECKER, *American Jour. Med. Sciences*, June, 1915.

Wright's stain was used in staining the films. Differential count showed a diminution in the small lymphocytes and polymorphonuclear neutrophils and an increase in the large lymphocytes and the irritation forms of Ehrlich. The large lymphocytes showed wide variation in the intensity of nuclear staining and the nuclei showed granules of various sizes and shapes not subject, however, to any definite arrangement. The cytoplasm also showed variations in intensity of staining. The same variations are true also for the polynuclears. P. F.

453

Vincent's Angina. F. MASSEI, *Arch. ital. di Laringol.*, Oct. 5, 1915.

Massei takes up the consideration of the various remedies suggested for the treatment of Vincent's angina and especially the use of salvarsan and neosalvarsan, locally, as suggested by Rolleston. He has had occasion to treat three cases by this method, the salvarsan being applied once a day for three days. One of the three patients was suffering from active syphilis. Improvement was marked in all three cases. The beneficial action of salvarsan on the disease is probably due to its being caused by the various spirochetes, including the pallida, and the spirilli, that are found in the mouth. P. F.

472

Unusual Course and Complications of Vincent's Angina. F. REICHE, *Munchener med. Woch.*, Feb. 16, 1915.

The author reports a case in which the constitutional symptoms were very severe, headache being the most prominent symptom. There was an enlarged spleen; unilateral paralysis of the abducens nerve and blood examination showed a leucopenia. The blood also showed an eosinophilia of over 16 per cent which was decidedly against typhoid leucopenia. There was considerable ulceration of the mouth. Wassermann negative (blood and spinal fluid). No diphtheria bacilli could be demonstrated in the mouth, but the Plaut-Vincent organism was present in large numbers. P. F.

488

Fifteen Cases of Cancer of the Mouth Successfully Treated with Radium. A STICKER, *Berliner klin. Woch.*, Vol. 52, p. 1040, 1915.

Of the fifteen cases, three were cancer of the tongue, seven of the lower jaw and five of the upper jaw. The radium was applied for twelve hours each night for a total of from three up to as many as fourteen nights. In cancer of the mouth where disfigurement follows radical surgical treatment Sticker believes that radium treatment is superior and is to be preferred. His views are quite radical in this respect and would hardly meet with general approbation as he believes that in cancer, general surgery tends to favor recurrence. Radium treatment, he holds, tends to produce immunity, the destroyed cancer cells being taken up in the body fluids and producing antibodies which immunize the body against cancer. P. F.

506

Frontal Sinus Suppuration with Results of a New Operative Procedure. H. A. LOTHROP, *Jour. A. M. A.*, July 10, 1915.

The patient is etherized and placed in a semi-supine position. A single curved one-inch incision is made in the inner portion of the eyebrow, limited externally by the supra-orbital arch in order to avoid the nerve. The bone over the sinus is bared of periosteum and the sinus entered by means of a chisel. It is then enlarged with a rongeur forceps to make an oval opening. Any pus, polypi or granulations are removed. A probe is passed through the ostium into the nose to serve as a guide. The walls on the floor of the sinus are broken down with small curved curettes, the posterior angle of the sinus being avoided. By means of the author's rasps and the burr drills devised by Tilley and Ballinger the interfrontal septum should be perforated and burred away for the purpose of exploring the other sinus. The perpendicular plate of the ethmoid should also be removed by the burr and the agger-nasi cells and other neighboring ethmoid cells broken up with a large burr. The skin incision is closed without drain and all tampons removed. P. F.

518

Tuberculosis of the Frontal Sinus; Report of Two Cases. J. B. THOMAS, *Jour. A. M. A.*, July 24, 1915.

In the first case the outer table became perforated and the patient recovered after the operation. The patient, a female, had attended her mother for a number of years of chronic pulmonary tuberculosis and had herself suffered from Pott's disease which had left her somewhat deformed. In the second case the frontal sinus tuberculosis was complicated by osteomyelitis, epidural, subdural and cerebral abcesses. Thomas believes that the high position of the sinus and its better drainage, the bactericidal action of the mucousa, cillia and tears serve to protect the frontal sinus from infection. P. F.

519

The Pernasal Operation for Frontal Sinus Suppuration. P. WATSON-WILLIAMS, *Lancet*, p. 362, and *Bristol Med.-Chir. Jour.*, p. 24, 1915.

The technic of the operation is the following: The anterior margin of the middle turbinate is engaged with a small angular ethmoidal forceps at its point of attachment to the outer nasal wall and cut through. Keeping to the outer side of the vertical plate of the ethmoid all the agger cells and anteconchal cells are clipped away right up to the crista nasalis. The anterior ethmoidal cells including the bulla ethmoidalis are removed by forceps and the thicker projecting partitions of the cells are laid open and punched away. The size of the sinus is guaged by means of bougies. If a No. 17 bougie enters the sinus the bony boss can be burred away with a 4 mm. wide burr until it enters the sinus. The operation ought to be controlled by a skiagram and if the frontal sinus opening lies well to the outer side and tends to guide entering probes towards the orbital roof it is well to draw the sliding forceps or burr towards the front so as to enlarge the frontal ostium to the front and inward rather than toward the orbital roof outward. With the small forceps any projecting ethmoidal cells may be clipped away. After treatment consists of lavage of the sinus with mild antiseptics or colloidal silver preparations, the passage of the largest bougie that the canal will take in order to prevent adhesions and keep the passage free. In stretococcic infections the author recommends giving about 30 c.c. of polyvalent antistreptococcic serum before operation, and employing sensitized vaccines after operation. P. F.

527

Pathology and Therapy of the Spheno-ethmoid Recess. P. J. MINK, *Arch. f. Laryngol. und Rhinol.*, Bd. 29, H. 2, 1915.

Mink states that heretofore the spheno-palatine recess has been reached surgically by first removing the posterior end of the middle turbinate. This recess bears the same relation to the posterior sinuses as the hiatus bears to the anterior sinuses. Pathological conditions in this region are of importance owing to the close relationship between the mucous membrane and the spheno-palatine ganglion. The spheno-palatine recess should be considered a part of the respiratory tract; the air stream at first follows the passage between the middle turbinate and the septum and rises higher according to the depth of the inspiration. Although the location of the recess forms a relative protection against any harmful influence of the air, the upper posterior part of the fossa, through the suction exerted at the close of inspiration, has a tendency to draw secretions and foreign bodies into the sinuses. In acute inflammations of the nasal mucosa the posterior upper part of the nasal fossa is shut off from the rest of the nose by the swelling of the rima olfactoria, so that the secretions have to drain through the spheno-ethmoidal recess. Treatment of inflammatory conditions of the upper posterior part of the nasal fossa requires the application of vapors by means of a thin catheter which can be pushed up into the swollen rima olfactoria. A vapor of a saturated solution of menthol in oil of turpentine is applied through the catheter. Adrenalin should be ap-

plied to the rima olfactoria in order to keep it open; for this purpose Mink has devised a thin double-tubed apparatus. In chronic catarrhal inflammation the nasal tissues should be shrunk with 10 per cent cocain followed by silver and iodin applications (Mink describes a thin 1 mm. silver wire to facilitate these applications). P. F.

552

A Modification of Skillern's Preturbinal Operation on the Maxillary Sinus. J. C. G. MACNAB, *Jour. Laryngol., Rhinol. and Otol.*, p. 333, Sept., 1915.

The disadvantages encountered by Macnab with the Skillern operation: (1) The dressings were always painful; (2) the opening had a great tendency to close up; (3) it was impossible to know when to leave out the packing.

The modification of the operation by Macnab makes it partake more or less of a radical operation. Having completed the operation as described by Skillern, the antrum is filled with the French embalming lotion (iodoform, menthol, eucalyptol, balsam Peru, ether) which is allowed to remain five minutes. A small curette is now employed to freshen the mucous lining of the floor of the antrum for about a centimeter adjacent to the nasal floor. The ridge of bone having been carefully polished down, with a scissors the lining of mucous membrane of the outer nasal wall is cut through close to the insertion of the inferior concha and folded neatly on the antral floor, being kept in place by packing the antrum with one-inch bismuth gauze which has been previously boiled in parolein. This remains forty-eight hours. Should the mucous flap show any tendency to curl up, the antrum is repacked.

The patient now has a common antral and nasal cavity all under the inferior turbinate as no part of that bone has been sacrificed. The cavity can be washed out without any discomfort.

The patient need be seen about once a week. All the cases operated on by this modification were well within five weeks. P. F.

554

Intranasal Antrum Operations, with Report of Ninety Cases. H. MCNAUGHT, *Jour. A. M. A.*, Sept. 4, 1915.

From an experience covering ninety cases, McNaught does not believe that antrum infections arise most often from the teeth. In his series very few cases were of this etiology. The author prefers the Krause operation modified by himself with the use of the Reeves punch which obtains better drainage and facilitates intranasal applications.

P. F.

568

The Importance of the Paranasal Sinuses in the Explanation of Pain in the Face, Head, Neck and Shoulders. M. A. BLISS, *American Journal of the Medical Sciences*, February, 1915.

It is the author's view that inflammation of the nasal sinuses or in the nasal cavity proper may involve the spheno-palatine ganglion and give rise to pain at the root of the nose, around the eyes, in the jaws and teeth extending to the zygoma, ear, mastoid, occiput, neck, scapula,

breast, and in severe cases, to the arm, forearm, hand and fingers. Associated with the pain may be disturbances of taste and diminished sensibility of the soft palate, pharynx, tonsils and nasal mucous membrane. The author has recently met with cases exhibiting all the features mentioned. P. F.

577

Diagnosis and Treatment of Suppuration of the Nasal Accessory Sinuses. F. DIEBOLD, *Correspond. Blatt fur Schweizer Aerzte*, Aug. 14, 1915.

For locating the source of pus, Diebold uses hexaethyl violet (hexaethyl rosanilin chlorid) as the dye best adapted for this purpose. Furthermore, the stain may be used as a therapeutic agent because it softens up the thick secretion in the sinus and the fetid odor is notably reduced even by one application.

Its employment is as follows: a small piece of the substance (it comes in solid form) is melted on the end of a probe and introduced into the cavity to be examined. A single grain will stain all the secretions accumulating there. The tint, however, deepens gradually and becomes most intense from the third to the sixth day, but traces of it may even be found as long as six weeks after the application. The thicker the secretion the longer it takes for the crystals to dissolve and as the stain is not readily soluble in salt solution or blood, there is little danger of any toxic effect from it. P. F.

587

Three Cases Showing the Shoulder-Arm-Hand Syndrome of Paranasal Disease Cured by Operation. J. C. G. MACNAB, *Jour. Laryngol., Rhinol. and Otol.*, Sept., 1915.

The three patients were males between twenty and forty years of age. All showed sufficient nasal abnormality to warrant an exploration of the posterior ethmoids and sphenoids. Examination showed that the principal pathologic condition was enlarged cystic cells easily broken down and lined with mushy mucous membrane. As complete an exenteration as possible of the posterior cells was carried out and the entire anterior wall of the sphenoid was removed. The symptoms rapidly disappeared, followed by complete cure. P. F.

601

Sudden Blindness Due to Suppuration of the Accessory Nasal Sinuses, with Report of Three Cases. H. H. STARK, *Journal of the American Medical Association*, October 30, 1915.

The author has collected some 88 cases from literature, and the three of his own. In two of his cases, the patient became suddenly blind, the other one gradually. Ophthalmoscopic examination practically negative. The cases regained sight after removal of anterior portion middle turbinate and draining the ethmoid cells. Draws attention to the importance of recognizing this condition. PACKARD.

605

The Treatment of the Various Forms of Inflammation of the Mucous Membranes of the Nasal Accessory Sinuses. W. UFFENORDE, *Arch. f. Ohrenheilkunde*, May, 1915.

The author considers the diseases collectively from the histological, anatomical, clinical and therapeutic points of view. The histological examination consisted principally of the mucous membrane of the maxillary antrum after the radical operation. The cases were usually of a chronic nature and Uffenorde distinguishes (1) a catarrhal-edematous form showing a regression of the cell infiltration and edema and later proliferation of connective tissue; (2) a pustular form in which there is more or less round-cell infiltration of the stroma and subsequently considerable fibrous thickening; (3) a mixed form in which the processes of the two preceding forms occur. The inflammation always takes place from the superficial to the deeper parts, the involvement of the bone being secondary and not primary. Metaplasia of epithelium was found only in the pustular form. Uffenorde argues against primary disease of the maxillary antrum and believes that it is always secondary to infection from the nose.

Anatomically the catarrhal-edematous inflammation is characterized, aside from the absence of pus, by severe edema of the mucous membrane often showing large polypi and numerous cysts. The mucous membrane may easily be dissected off also. In the pustular form the mucous membrane is more vascular and in early cases moderately swollen. The fibrous hyperplasia is considerable and hence the removal of the mucosa from the bone is more difficult. In the mixed form the processes taking place in the two previous forms are in evidence.

Clinically, in the acute forms there were present inflammatory hydrops with typical, yellowish secretion from the nose. In the chronic cases the catarrhal serous form is characterized by polypoid swelling of the mucous membrane with polyp formation in the middle nasal passages, more rarely with polypi occluding the entire nasal cavity. The affection is usually bilateral. In the pustular form there is an absence of polyp formation and instead of swelling in the antrum there is atrophy. Not rarely there may be secondary infection.

Treatment. In acute cases operative measures are disadvised and expectant treatment recommended. The same also in the dematous form with orbital complications. In chronic cases, Uffenorde recommends operation by the Ritter-Jansen or the Luc-Caldwell method. He believes that these methods offer the best prospects of avoiding a recurrence of the formation of polypi and of curing respiratory complications by getting rid of the irritating hypersecretion. In sixty such radical operations there was an entirely successful outcome in all. In the pustular form favorable results may be obtained in 40 per cent of cases by means of conservative methods. Uffenorde sees the key to the recurrent polyp question in the view that the edematous-catarrhal form is diffuse and involves all the accessory cavities requiring their radical exposure and cleaning out. P. F.

606

Roentgenology of the Accessory Nasal Sinuses, with Special Reference to Sinusitis in Children. C. W. WALDRON, *Interstate Med. Jour.*, Oct., 1915.

Sinusitis is relatively frequent in the young and is often undiagnosed. Children may come complaining of long-standing nasal discharge uncomplicated by headaches or general symptoms. In others, headaches, more generally frontal, may be the prominent symptom with negative eye and gastro-intestinal symptoms. Or the child complains of cough and expectoration. Examinations of the chest and sputum are negative and another source of the trouble must be looked for.

The intranasal examination for sinusitis is difficult and frequently of little value in differentiating between ethmoidal and antrum infection. The author places no reliance on the transilluminating lamp. The roentgenogram is essential in the rational treatment of either maxillary ethmoidal or frontal sinus because it is necessary to determine if the maxillary sinus is the source of the chronic discharge and should be treated by lavage or drainage, or whether the frontal sinus are affected and the anterior ends of the middle turbinates should be removed to facilitate drainage or whether the ethmoidal cells are alone involved and inhalations, irrigations or local applications should be the form of treatment. P. F.

632

A Study of 1,000 Cases of Stammering, with Special Reference to the Etiology and Treatment of the Affection. G. HUDSON MAKUEN, *Volta Review*, July, 1915.

Age. The affection usually begins during the first few years of the developmental speech period which is between the ags of two and four or five. It is rare for the affection to begin after puberty, for by that time the speech habits have become more or less fixed (one patient began to stammer after he was twenty-three years of age).

Sex. Seventy-seven per cent. were in males and twenty-three per cent. in females. The reason for the smaller percentage in females Makuen ascribes to the greater natural aptitude of females for all work requiring the finer co-ordination of muscles. Aphasia is also less common in females than in males and stammering is a species of this condition. Both stammering and aphasia are undoubtedly of cerebral origin, the results of either functional or organic disturbances of cerebral speech centers and these centers appear to be more unstable and variable in the male than in the female.

Temperament. Emotional, sensitive, hesitating. The fear of the stammerer usually originates in his embarrassment at not being able to talk. Fear is the most dominant characteristic of the stammerer and is largely the result of the stammering itself. Afterwards it may become a secondary causal factor.

Mentality. Dividing his cases into three classes Makuen places in Class 1 those of average mentality—(85 per cent. of the whole number); in Class 2, those slightly below the average (14 per cent) and in Class 3, those of distinctly feeble mentality (1 per cent.). The fact

that so large a percentage is of average mentality, Makuen considers of importance because these individuals having more to say, feel more the importance of saying it than those in the lower grades of mentality. Difficulties of speech always increase with the desire to speak and with the necessity for speech.

Heredity. This is the most important factor in the etiology of stammering, notwithstanding the fact that it is an acquired affection in the sense that speech itself is an acquired faculty. Thirty-nine per cent of the patients admitted having or having had relatives who stammered.

Consanguinity. Twenty-nine patients, or 2.8 per cent. were offspring of consanguineous marriages.

Association. Association with other stammerers and either voluntary or involuntary imitation are undoubtedly factors in the etiology of stammering.

Fright or Injury. Twenty-eight per cent. of the patients dated the origin of their affection from the instant of having received a nervous shock. A very important factor in the etiology of stammering. The cerebral speech mechanisms have been thrown out of gear and have never righted themselves.

Vision. Twenty-six per cent. of the patients had faulty vision owing chiefly to a defective action of the muscles.

Audition. Only 3 per cent. had subnormal hearing and this seemed in no respect to be related to the affection.

Nose and Throat Conditions. No less than 97 per cent. complained of some nose or throat trouble and in 36.8 per cent. operations were performed for their relief. Over 37 per cent had intranasal pressure due to various irregularities of the septum and about 11 per cent. of them were operated on. About 60 per cent. had diseased tonsils and adenoids and half of them were operated on.

Treatment. Psychological and physiological. The stammerer must learn to idealize speech. If he thinks stammering speech he will stammer. From past experience he sees trouble ahead and the fear of this trouble amounts in some instances to an obsession, paralyzing all effort. The patient must be helped to remove the mental confusion arising from this fear. P. F.

633

The Psychology of Stammering. G. HUDSON MAKUEN, *N. Y. Med. Jour.*, p. 117, July 17, 1915.

The author agrees that stammering is a "transient auditory amnesia." The four language centers in the cerebral cortex are divided into two groups: the auditory and glosso-kinesthetic centers constitute the "primary couplet," as Bastian termed it, representing spoken language and the remaining couplet, the visual and chiro-kinesthetic centers, represent written language. The difficulty of the stammerer is more with phonation than with articulation. As the articulatory element of a word is represented for the most part kinesthetically and as the phonatory element depends upon auditory stimuli, it follows that the disability exists chiefly in the auditory region of the cerebral cortex. While the weakness or hyperesthetic condition of the auditory speech-center is often congenital, stammering speech is, in a way, an acquired

affection. So far as heredity is concerned, Makuen states that 39 per cent of his patients admitted having had relatives who stammered, but the stammering, like deaf-mutism, is not inherited, only the physical anomalies that give rise to the affection. Sometimes it may skip one, two or even three generations.

Fear and autosuggestion are only secondary factors in stammering and are themselves the result of the individual's experience as a stammerer and, if they do not become too well established, the stammering will cease.

Makuen is of the opinion that psychoanalysis, so far as treatment is concerned, is of little avail. Arousing and training the patient's auditory imagery through the proper use of the peripheral organs of speech or psychophysical therapeutics offers the better chances of improvement. The prognosis must, however, depend upon the degree of the underlying anomalous physical condition giving rise to the amnesia. P. F.

684

Technic of Laryngeal Heliotherapy. DR. COLLET (LYON), *Revue de Laryngology, D'Otologie et de Rhinologie*, Sept. 30, 1915.

Collet advocates heliotherapy in tuberculous laryngitis, and divides the methods into Direct and Indirect. He believes that the external method is ineffective as the ultra-violet rays, which have the greatest efficacy, are rapidly arrested and do not penetrate the external tissues.

In the "stomatodiale" method the direct sun rays are allowed to enter the larynx in a manner similar to that used in the practice of direct laryngoscopy. For the indirect method, Collet suggests an ingenious arrangement by which the patient himself projects the sun's rays into the larynx by means of a laryngeal mirror. W. SCHEPPEGRELL.

698

Treatment of Laryngeal Tuberculosis in Sanatoria for Pulmonary Tuberculosis. T. BERGTRUP-HANSEN. *Ugeskrift for Laeger*, Sept. 23, 1915.

During the last two years the author has observed at the Silkeborg Sanatorium, 63 cases of laryngeal tuberculosis, the diagnosis of which was based on ulceration, infiltration and granulation. But in only two of these cases was the laryngeal disease a more important factor than the pulmonary disease. In 55 cases the pulmonary disease was in the third and in 8 cases it was in the second stage. In 21 cases with severe laryngeal disease the patients were debilitated and febrile; hence the treatment could only be palliative. The only operative treatment was an occasional amputation of the epiglottis for dysphagia or an injection of alcohol into the laryngeal nerves. In 29 cases of slight laryngeal disease, the condition ran parallel with the pulmonary disease and the only treatment in these cases was the application of menthol and lactic acid in addition to the sanatorium treatment. The author concludes that radical operative treatment should be confined to few cases and should be undertaken when the condition of the lungs is not hopeless. Too active treatment of the larynx in several cases in his experience have proved detrimental to the lungs. Three advanced cases of laryngeal tuberculosis were greatly benefited by artificial pneumothorax, the ulcerations in two cases healing completely. P. F.

747

Operative Treatment of Laryngeal Tuberculosis. TH. RUEDI, *Zeitschr. f. Ohrenheilkunde*, Bd. 73, H. 3, Nov., 1915.

From 1908 to 1914 the author examined about one thousand cases of tuberculosis of the larynx, 575 of which were operated upon laryngeally in a total of 1,548 sittings. Two-thirds of the patients were males, one-third females. In all cases the laryngeal tuberculosis was secondary to pulmonary tuberculosis. In many cases the clinical diagnosis was controlled and confirmed pathologic-anatomically. The 1,548 sittings were as follows: Curettement, 61 sittings; curettement and cauterization, 168 sittings; electrocautery alone, 1,319 sittings. Where there was a history or suspicion of syphilis a Wassermann test was made and if positive salvarsan and potassium iodid treatment instituted.

Without regard to the stage of the pulmonary tuberculosis, Rüedi divides his cases into three classes: (1) *Light cases*, in which there is a single, circumscribed focus without any tendency to rapid progress or rapid destruction; (2) *moderately severe cases*, with multiple, circumscribed foci without any tendency to rapid progress and rapid destruction and (3) *diffuse or severe cases*, (a) yielding to treatment and (b) characterized by fever, rapid destructive process and perichondritis.

There were 259 cases belonging to the first class, 265 to the second class and 51 to the third class.

The conclusions reached by the author are: (1) Laryngeal tuberculosis is curable. (2) In Davos (a tuberculosis *kur* place) spontaneous improvement and cure are often observed. Many cases not reacting to general treatment or conservative local treatment, notwithstanding the improvement in the pulmonary condition, may be permanently cured by operative treatment. (3) Operative treatment is indicated where there is no fever and where preferably the lung process is at a standstill. (4) The best operative procedure is the electrocautery, according to the Mermod-Siebenmann method, but in tuberculosis of the epiglottis, resection or amputation is more advisable. (5) In more than one-third of the cases there was a cure in at least three months after the last treatment. The best results were obtained in tuberculosis of the vocal cords with the electrocautery (52 per cent. cures). (6) In many cases operative treatment also induces a favorable influence on the lungs and the general condition. (7) The view that in laryngeal tuberculosis a high altitude *kur* is contraindicated, is false. P. F.

753

Laryngeal Papilloma Treated and Cured by the Roentgen Rays. I. G. SHALLCROSS and W. D. BAYLEY, *Jour. Ophthalmol., Otol. and Laryngol.*, Oct., 1915.

A woman of twenty-four years of age suffered from aphonia for about eight months, the condition first starting as a slight hoarseness and gradually progressing to complete aphonia. No dyspnea and no pain were complained of. Examination showed a papilloma about the size of a barley grain attached under the middle third of the right vocal cord near its free edge. Operation was performed on three different occasions but the tumor recurred and it refused to yield to any form of treatment,

including the galvanic cautery. The Roentgen rays were finally resorted to under which treatment, after several weeks, the tumor became smaller and lighter in color. After fifteen months' treatment the tumor finally had disappeared, leaving a small, thickened spot at the site of the original tumor. Twice weekly this was treated with argyrol. The patient regained her voice and all traces of the tumor disappeared. P. F.

754

Laryngeal Diverticula. GEORGE E. SHAMBAUGH and DEAN LEWIS, *Annals of Surgery*, Vol. LXI., No. 1, Jan., 1915.

Such diverticula are rare. Many cases in earlier literature were thyroglossal cysts, vascular struma, or a localized emphyema resulting from perforation of the cartilages of the larynx, by some inflammatory process, such as tuberculosis. Larrey was the first to give an accurate description of laryngeal diverticula. He saw them in Egypt in the blind who were employed by the priests to recite the Koran from the minarets. The authors summarize briefly the observations of other observers. They report a case of combined type of extra- and intralaryngeal diverticulum which they observed, and describe the operative treatment which they pursued. PACKARD.

758

The Conservative Treatment of Intrinsic Cancer of the Larynx by Thyreocricotomy or Thyrotomy. GEORGE DAVID STEWART, *Annals of Surgery*, Dec., 1915.

Operation for intrinsic cancer of the larynx offer better results with less crippling than possibly any other site in the body. This is due to several facts.

1. Early discomfort causes patient to seek examination.
2. Scanty lymphatic draining larynx and the restraining influences of the cartilage.
3. Intrinsic cancer of the larynx maintained by many or essentially a slow-growing neoplasm.

It is always advisable to remove section for examination. Difficult if growth is under cords, may have to do thyrotomy.

TECHNIQUE OF OPERATION.

1. Tracheotomy may be done at the time of removal of the growth or two days before.
2. Split thyroid cartilage in the angle between its protecting the anterior insertion of the vocal cords.
3. After thyroid is opened, paint larynx with 4 per cent. solution of cocaine to prevent coughing.
4. Tampon upper portion to prevent soiling from mouth.
5. Outline growth and remove.

If the arytenoid is involved, or the growth crosses the posterior commissure a partial laryngectomy must be done.

6. Wound can be closed without drainage.

After-treatment consists in keeping the head low until patient comes out of ether. Moist air in the room. Remove tube in 48 hours, but may have to replace on account of edema. Get patient up on the third day.

Feeding is difficult and may have to use nasal tube. Mortality small. Speech always possible, often satisfactory. This operation applicable in one-third of all cases of laryngeal cancer. Contraindicated if arytenoid cartilage and interarytenoid fold involved, also in other extrinsic cancer.

PACKARD.

761

Granuloma of the Vocal Cord. SIR ST. CLAIR THOMSON, *Jour. Laryngol., Rhinol. and Otol.*, Nov., 1915.

The patient, a male, aged forty, complained of hoarseness for the previous two months. Examination of the larynx showed a pedunculated, mobile tumor adherent to the free edge of the right vocal cord just in front of the processus vocalis. The growth was avoid, smooth, purplish and the attached extremity slightly yellowish and puckered. During inspiration it would fall below the glottis. Movement of the right cord was free. Some enlarged glands at the angle of the jaw. The growth was removed with a Mackenzie forceps by the indirect method and histological examination showed it to be a tumor consisting of fibrin and granulation tissue, covered by squamous-celled epithelium showing no evidence of malignancy.

The patient gave no specific history or a history of traumatism to account for the growth and it was situated too far back on the cord to be connected with nodular thickening produced by misuse of the voice. The author suggests that it probably originated in a submucous hemorrhage with incomplete absorption of the effused blood and irritated into a granuloma by misuse or overuse of the voice. P. F.

772

Lung Gangrene from Primary Stone of Bronchus. BLECHER, *Mitteilungen d. Grenzgeb. d. Med. und Chir.*, Bd. 28, H. 4, 1915.

Blecher's patient, a man 23 years of age, had had an attack of what was diagnosed as pleurisy from which recovery was without incident. A month later the patient began to cough and complained of pain in the right side. The trouble proved to be a primary stone in the bronchus of the lower lobe, complicated by gangrene and pyopneumothorax from gas-producing suppuration. Outcome fatal from peritonitis. P. F.

774

Foreign Body Pneumonias. A. CAILLE, *Arch. Pediatrics*, Dec., 1915.

Three cases are reported by Caille. In the first a large tack was lodged in the right lung for about five weeks. In the second case the roentgenogram showed a large nail in the left bronchus and partly in the trachea. In the third case a shawl pin was found in the left bronchus and lung, the point projecting at the bifurcation of the trachea. It had been in the lung for 43 days without inducing local inflammation. In the first two cases the foreign bodies were removed by bronchoscopy; in the third, the patient, during a spasmodic coughing spell, coughed up the pin, which was two and one-half inches long. All the symptoms cleared up after removal of the foreign bodies. P. F.

824

Fistula of Esophagus and Bronchus. Report of Case, with Roentgenologic Findings. RAYMOND COLE BEELER, *Journal of American Medical Association*, Oct. 2, 1915.

Patient admitted to hospital for Roentgen examination of esophagus. Middle-aged man, history of syphilis some forty years previous; no history of swallowing escharotics. Had difficulty in swallowing that had gradually gotten worse over a period of six months. A week before had hemorrhages and suffered from violent coughing spells when he tried to eat or drink.

Given barium and the fluoroscope showed it had passed down the esophagus a short distance and then to go through and fill the bronchi. Further x-ray examination showed a mass of barium just above the bifurcation of the bronchi, probably a dilation at the region of the fistula.

Patient died one week later from pneumonia but no autopsy was obtained. PACKARD.

839

Esophageal Stricture in Children. C. W. M. HOPE, Proc. Roy. Soc. Med., Laryngological Section, V. 8, No. 6, April, 1915.

Case 1. Boy, seven and a half years old, has vomited at least once a day ever since the age of two months. X-ray examination showed a well-defined stricture of the esophagus behind the pericardium. Examination with the esophagoscope showed enormous dilatation of the upper esophagus containing much undigested food. The mucosa above the stricture was denuded in parts, bled easily on swabbing and showed scars on the right side. Stricture admitted a 5 mm. bougie and could be dilated up to 10 mm. Since the dilatation was done the patient only vomited once and has gained about one pound every day. He is now able to take solid food, having lived up to now on liquid food.

Case 2. Eighteen-months-old baby with a history of daily vomiting since birth. Examination with the esophagoscope showed the whole of the thoracic esophagus greatly dilated but no food in dilated portion. Bougies and the second largest Killian tube could be passed into the stomach without difficulty. The mucosa of the sub-diaphragmatic portion was thrown into large transverse folds. After simple dilatation, the child can now eat bread and butter. P. F.

874

Asthmatic Attacks and the Inhalation of Flour Dust. EMILE A. BERTUCCI, *New Orleans Medical and Surgical Journal*, Sept., 1915.

The causative relation of the flour in this case was demonstrated by dusting the air surrounding the patient with wheat flour, which was followed by a short attack of asthma. SCHEPPEGRELL.

926

Report of Intravenous Injection of Diphtheria Antitoxin. E. M. DUPAQUIER, *New Orleans Medical and Surgical Journal*, Sept., 1915

Intravenous injection of diphtheria antitoxin, which is usually reserved for severe cases, is recommended as routine in all cases. It is less pain

ful and more swiftly acting as the neutralizing antitoxin is brought at once in contact with the toxins. He believes that striking serum reactions are not a contra-indication, and that when the technic is perfected, it will be the routine method of treating diphtheria. SCHEPPEGRELL.

948

Schick Toxin Reaction for Immunity in Diphtheria. J. A. KOLMER and E. L. MOSHAGE, *American Jour. Dis. Children*, March, 1915.

The authors conclude that the toxin skin reaction is a valuable and reliable method for detecting susceptibility to diphtheria and that persons reacting negatively to this test usually contain at least one-twentieth unit of diphtheria antitoxin per cubic centimeter of serum, which amount of antitoxin is probably sufficient to protect against infection. Persons reacting positively to the test usually contain less than one-fortieth of a unit of antitoxin per cubic centimeter of serum and may be regarded as susceptible to infection; hence, in the event of exposure to infection, these persons should be passively immunized by an injection of antitoxin.

The studies of the authors show further that about 40 or 50 per cent. of children between 1 to 15 years of age react positively to the Shick test and that immunity conferred by a prophylactic injection of antitoxin begins to disappear after ten days and has generally passed away entirely after four weeks.

Another interesting point that the Shick test has shown is that scarlet fever patients have an increased susceptibility to diphtheria, 10 per cent. of them being susceptible within ten days, even after the injection of antitoxin. Another point is that the immunity conferred by an attack of diphtheria is of short duration or nil. P. F.

1011

A Case of Aberrant Thyroid. EDWIN L. DRAPER, *Albany Medical Annals*, Dec., 1915.

A married woman, 41 years old, mother of one child, complained of gradual swelling or enlargement of her abdomen. She had had a mastoid operation a year and one-half previously. In addition to the abdominal enlargement, the patient was short of breath on exertion.

Examination: slight facial paralysis (which had persisted since the mastoid operation). Heart and lungs negative. In the dorsal position both flanks were flat to percussion, tympanitic area 12x14 cm. in region of umbilicus shifting with change in position. Abdominal examination, because of the amount of fluid present, was otherwise negative. Blood and urine negative. Vaginal examination showed a distinct sense of resistance on right side.

Exploratory operation showed a mass on the right side with the broad ligament which proved to be a dermoid cyst. At the upper, inner and anterior corner of this mass were two walnut-sized masses closely connected with and protruding from the large mass, which, upon microscopic examination proved to be perfectly typical thyroid tissue of the colloid type. There was also a small cyst of left ovary which was also removed.

P. F.

1036

Comparison of Autoplastic and Homeoplastic Transplantation of Thyroid Tissue in Guinea Pigs. C. HESSELBERG, *Jour. Exper. Med.*, Feb., 1915.

A short time after operation no difference is noticeable in the behavior of the thyroid after autotransplantation and homeotransplantation. Later, the follicles in the homeografts begin to undergo destruction. This destruction is not caused by a direct primary disintegration of the follicles but is caused by the destructive activity of the lymphocytes and the connective tissue of the host tissue. The connective tissue grows into the homeografts in larger quantity than into the autografts. In the homeografts it becomes hyaline and fibrous, while in the autografts it remains cellular. Destruction by invasion of lymphocytes is direct. The rapidity and the degree of destruction in homeografts vary. In some, destruction by lymphocytes preponderates, in others, by connective tissue. The blood supply developed in the autografts is more abundant than in the homeografts. P. F.

1050

The Isolation of the Compound Containing Iodin which Occurs in the Thyroid; Its Chemical Nature and Physiologic Activity. E. C. KENDALL, *Jour. A. M. A.*, June 19, 1915.

By alkaline alcoholic hydrolysis the author has been able to split up the thyroid proteins into two groups: group A are the acid insoluble compounds and group B are acid soluble. From group A a pure crystalline compound containing 60 per cent. of iodin and which appears to be di-iodo-di-hydroxy-indol, has been isolated. Group B contains iodin in an unknown form of combination. The physiologic action of the group A compound consists of an increase in the rate and vigor of the pulse, in metabolism and in nervous irritability. Group B compounds are more toxic except in cases of cretinism, myxedema and some cutaneous conditions. P. F.

1160

Acute Otitis Media in Infancy and Early Childhood; Avoidable Mistakes in Diagnosis, Prevention and Treatment. W. R. P. EMERSON, *Boston Med. and Surg. Jour.*, Oct. 21, 1915.

Acute otitis media is the most frequently overlooked affection in infancy and childhood because the symptoms may not be at all distinctive. They may simulate pneumonia, meningitis, or just general symptoms with fever. The author reports five cases in which no earache was present and four of the cases had a double otitis media. In all cases, therefore, the ears should be examined as a routine measure whether the symptoms point to the ears as the source of the trouble or not, in the same way as the physician would examine the heart in rheumatism or the abdomen in typhoid. As to prevention, in every case of contagious disease or in affections of the respiratory tract in children, the nasopharynx should be kept clear by the use of a soothing spray to the mucous membrane and the instillation of a few drops of 10 per cent. solution of argyrol. Treatment of the onset of otitis media consists of the instillation of a few drops of adrenalin and one-half per cent. solution of cocain followed by a few drops of 20 per cent. argyrol. If the symptoms do not subside, the drum should be incised. P. F.

1161

A Case of Subacute Purulent Otitis Media Labyrinthitis and Purulent Leptomeningitis Due to a Capsulated Streptococcus; Spontaneous Recovery. J. S. Fraser and J. L. Owen, *Edinburgh Med. Jour.*, Oct., 1915.

The patient, 32 years old, suffered a mild attack of otitis media without otorrhea in January, 1915. The trouble recurred in February and at this time appears to have been accompanied by labyrinthine or intracranial irritation as evidenced by headache and vomiting. No discharge from the ear was present at this time. Otorrhea only commenced in the beginning of March. The patient was confined to bed for three weeks but resumed work about March 20, but after he had been at work only a week he became very ill with symptoms of purulent labyrinthitis, rapidly passing on to leptomeningitis. The stage of delirium followed by coma lasted only forty-eight hours. The patient made a complete recovery as far as balancing is concerned, the healthy side compensating the loss of function of the other vestibular apparatus. The only inconvenience felt by the patient is the unilateral deafness. P. F.

1164

Prognosis and Treatment of Severe Acute Middle Ear Disease. F. Kobrak, *Therapie der Gegenwart*, Bd. 55, H. 6, June, 1915.

According to Kobrak blood cultures, which should be made in every case of acute otitis, if negative would indicate that conservative measures are justified for several days, even in the presence of high fever, provided there are no local or general signs of complications. Instead of a stormy onset from the first the otitis media may start insidiously and after a mild course apparently subside. But soon a serious complication. In such cases, the author has found, the streptococcus mucosus capsulatus is the responsible organism and he warns that this type of otitis should be kept under strict supervision even after an apparent cure. Continued sub-febrile temperature will warn that the process is progressing insidiously. P. F.

1185

Otitis Media in Relation to Infant Pathology. F. Scherer and O. Kutvirt, *Jahrbuch fur Kinderheilk.*, Bd. 82, H. 2, Aug., 1915.

Fully in 22.3 per cent. of congenitally syphilitic infants and in 30.4 per cent. of tuberculous infants, the authors found otitis media; in both of these groups the ear disease developed insidiously. They found otitis media in 18.6 per cent. of nutritional disturbance and in as high as 25 per cent. of respiratory affection. They call attention to the gravity of the disease in infants and often convulsions of apparently obscure etiology are due to suppurative otitis media. P. F.

1187

Acute Otitis Media. Report of a Case in Seventeen Months Old Child. Clarence H. Smith, *New York Medical Journal*, Nov. 20, 1915.

Author reports a case of bilateral acute otitis media developing in a child after an attack of influenza and bronchitis. There was no tender-

ness over the mastoid. Drums were incised and three days later an abscess of the elbow developed. An abscess of the great toe had healed previously. Diagnosis of pyemia was made, developing from septic sinus thrombosis. The mastoid on the left side was opened, but the mastoid cells were normal. Three days later the left sigmoid sinus was exposed and a large clot of blood removed and some pus liberated. On the next day the jugular was exposed and tied. About ten days later the right leg was greatly swollen and the inguinal glands enlarged. Child discharged with ear condition well, but still shows signs of spetic arthritis.

PACKARD.

1188

Radium Therapy in Diseases of the Ear. D. J. SPINETTO, *Semana Medica*, Aug. 5, 1915.

After it was proved that radium was not detrimental to the sensorial apparatus of the ear and that it was capable of producing a retrogression of fibrous tissue, it was employed by Spinetto in chronic middle and internal ear affections showing a tendency to fibrous connective tissue proliferation. A glass tube containing ten mgm. of radium bromide was covered with black paper and rubber tissue and introduced into the ear so that it came in contact with the tympanic membrane. It was allowed to remain in contact for ten minutes. At intervals of eight to ten days, these periods were lengthened by five minutes. Improvement in hearing and beneficial changes in the tympanum were noted. P. F.

1194

Tuberculosis of the Middle Ear Cleft in Children.—A Clinical and Pathological Study. A. L. TURNER and J. S. FRASER, *Jour. Laryngol., Rhinol. and Otol.*, June, 1915.

Cases of tubercular otitis media may be divided into two groups: (1) tubercular otitis in infants and young children who have been fed in whole or in part on unsterilized cows' milk containing tubercle bacilli. Tubercular otitis media as compared with other forms of otitis in infants and young children is exceedingly frequent. The authors' statistics show that 27 per cent of the cases of purulent otitis in children under two years of age are due to tuberculosis while the same is true in 50 per cent. of the cases in children under one year of age. On the other hand, tubercular otitis of all cases during all ages accounts for 2.8 per cent. There is no direct proof as yet that tubercular otitis in the infantile cases is caused by the bovine type of tubercle bacillus but there is good reason to presume so.

(2) The second type of tubercular otitis media occurs in the advanced stages of pulmonary tuberculosis. This form is not very frequent.

The route of infection in tubercular otitis media is still unsettled: (1) through the Eustachian tube and (2) by way of the blood stream. In the former route the infection may extend by tubercular infiltration of the mucous membrane of the tube or else the tympanic cavity may become infected by the insufflation of infectious particles from the naso-pharynx. In the latter route, hematogenous infection is a possibility if the mastoid

alone is diseased and the tube and tympanum are healthy. Direct extension through the Eustachian tube is perhaps the more probable route of infection.

The clinical types of tubercular otitis media may be classified as (a) lupoid, in cases of lupus from the nose and throat; (b) an infiltrating form which progresses rapidly and shows numerous tubercle bacilli but few giant cells; (c) a chronic form characterized by few bacilli and many tubercle follicles, the mucosa being greatly thickened and showing a tendency to polyp formation. This form also shows a tendency to encapsulation of the tubercle follicles and spontaneous cure of the condition. (d) A necrotic form which undergoes rapid caseation and destruction of the mucosa and of the bony capsule of the labyrinth. (e) A fibrinoid form in which a false membrane occurs on the tympanic mucosa and (f) as shown in the present paper by the authors, a fibro-ossifying type.

Involvement of the labyrinth in cases of tubercular otitis media is frequent, varying from 23 to 33 per cent. The statistics of the authors show that necrosis of the labyrinth was present in 22 per cent. of the cases operated on, while in a further 31 per cent. there was erosion of the labyrinthine wall. Clinically, tubercular labyrinthitis, like tubercular otitis media, appears to have an insidious onset, in marked contrast to the acute symptoms produced by acute purulent labyrinthitis.

The diagnosis of tubercular otitis is made by attention to the following points: (a) Clinical characteristics. (b) The operative findings. (c) The examination of the ear discharge for tubercle bacilli. (d) Microscopic examination of the "granulations." (e) Animal inoculation with the ear discharge. (f) Differentiation of the human from the bovine type of tubercle bacillus by making cultures on egg medium from the tubercular lesions in the guinea pig injected and the later injection into rabbits. P. F.

1199

A New Treatment of Middle Ear Disease. C. E. WILLIAMS, *Jour. Ophthal., Otol. and Laryngol.*, June, 1915.

When treatment is begun the patient usually calls every other day for two weeks and then the treatment is continued at the same or less frequent intervals according to the results of the tests. With the Siegel otoscope the air in the external auditory canal is alternately rarified and condensed from ten to twenty times. The force exerted should be very mild at the start and gradually increased until the tympanic membrane shows greater mobility. Best results follow the gentler massage which is not followed by intense injection of the drum-head.

Following this, Dowling argyrol tampons are placed and left for a period of from ten to sixty minutes. After removal of the tampons the naso-pharynx and nasal fossae are douched thoroughly with a mild alkaline solution followed by an oily spray and the inhalation of an oily vapor. Where the naso-pharyngeal tissues show hypertrophy this should be treated by Lugol's or argyrol solution on an applicator. Adenoids should be removed surgically. The treatment is completed by massage from thirty to one hundred and twenty seconds over each ear. P. F.

1210

Sarcoma of the Cartilaginous Eustachian Tube. Dr. Jacod (de Lyon), *Revue de Laryngologie, D'Otologie et de Rhinologie*, Aug. 31, 1915.

Jacod reports two cases, the first without and the second with operation, both of which terminated fatally. The first symptoms observed in sarcoma of this region are auricular, especially quickly developing unilateral deafness, and is usually accompanied by the sensation of a foreign body in the nasopharynx, and violent pain referred to the affected ear. The development of the sarcoma is unusually rapid and the prognosis very grave.

After discussing the various operations, he believes that the resection of the superior maxilla is the most practical route for enucleating the noplasm. W. Scheppegrell.

1236

The Origin of Labyrinthine Rest-tone. E. P. Fowler, *Jour. A. M. A.*, Jan. 9, 1915.

Fowler reaches the following conclusions:

(1) Physiologic endolymph movements excite impulses from the end-organs which are interpreted as sensation complexes from all the ampullae. If the impulses from the two labyrinths approximately balance (or through practice are balanced by the aid of the co-ordinating apparatus), no sensation of movement is experienced. Binaural galvanic or caloric reactions with the head anywhere in the antero-posterior planes demonstrate this clearly, as does the rotation of bilaterally non-functionating labyrinths..

(2) The body normally receives a sensation-complex (and a tonus) in the antero-posterior vertical plane, approximately equal from its both sides, but in all other positions various complexes must be forthcoming, depending mainly on the position of the head.

(3) Balance tonus originates from all the labyrinth end-organs.

(4) Endolymph stress is sufficiently capable of maintaining static control in rest, as it does so in action.

(5) Positive endolymph stress, within the canal at rest, can occur only because of connection currents present therein.

Fowler regards convection currents as due (1) to a difference in temperature in the inner and outer labyrinth walls (this does not take place in health) and (2) to a constant but variable difference in temperature within the ampullae and the non-ampullated portions of the canals, because the blood-heat is transmitted mainly by conduction and radiation to the ampullae and as the tiny branches lie along the concavity of the canals, they receive less and less heat the further the blood courses from its source, for the reason that blood-vessels coming from within the cranium contain blood of a higher temperature than those from without and the internal auditory artery traverses the inside of the skull before distributing its blood-heat to the ampullae. The specific gravity of the endolymph adjacent to the ampullae is lowered as a result of the difference in temperature and within every canal not on the horizontal plane a current is impelled by the force of gravity, causing stress on the capulae of all the canals at all times. P. F.

1239

War Deafness from Lesions of the Internal Ear. A. Got, *Gazette hebd. des sciences med.*, July, 1915.

Since the beginning of the war the author has had under observation about one hundred cases of deafness due wholly or in part to disease of the internal ear. All the cases showed cochlear hypo-excitability. Of seventeen deaf as a result of shell explosion, bombs, grenades, etc., four were hyper-excitable as regards the vestibule, eleven hypo-excitable, none were unexcitable, two were normal. Of thirteen deaf as the result of direct wounds of the head, five were hyper-excitable, four hypo-excitable, two unexcitable and two normal. From the etiological standpoint the cases (thirty-two in all) fall into two groups: one in which the injury resulted from explosions acting through the air as an intermediary, the other which resulted from projectiles inflicting direct injury to the head. In the former the hemorrhages are probably less severe than in the latter, but there is probably concussion of the organ of Corti with or without disintegration of the membrane. As regards prognosis, the author found that the cases improve fairly quickly, even with regard to the cochlear reaction, but the only cases in which he has seen a complete cure are the psychic cases. In the organic cases during improvement from the vestibular point of view, the vertigo, along with the nystagmus, is usually the first symptom to disappear and gradually equilibrium tends to become more normal. On the cochlear side, however, the symptoms tends to persist. P. F.

1244

Syphilis of the Internal Ear (Hereditary). H. Hastings, *Jour. A. M. A.*, Aug. 14, 1915.

Patient, a girl twenty years old. Her parents had been infected with syphilis but considered themselves cured. When a child, the patient had had trouble with her eyes (interstitial keratitis) but otherwise her general health had been good. Her hearing was greatly impaired and she also had nystagmus and vertigo. Wassermann (blood) negative. Salvarsan being objected to, the patient was put on mercurial treatment, under which her hearing improved. P. F.

1246

Isolated Vestibular Neuritis Following Typhoid Inoculation. C Hirsch, *Deutsche med. Woch.*, Aug. 19, 1915.

An army surgeon was twice inoculated with typhoid vaccine. The first inoculation was well tolerated but twenty-six hours after the second inoculation the patient became exceedingly giddy and developed severe vomiting on the slightest movement of the head. During the following night the pulse and respiration were abnormally slow, spasmodic contractions of the jaw muscles, tinnitus and numbness of the fingers. The eye grounds showed nothing abnormal. Diagnosis of hemorrhage into the left labyrinth was made. Four weeks after the appearance of the first symptoms the patient still felt giddy on turning his head or eyes, especially to the left. Marked ataxia on rapid movement; no spontaneous nystagmus or deafness. After three months the patient was able to some extent to resume his surgical work. P. F.

1259

Galvanometric Studies of the Cerebellar Function. I. L. MEYERS, *Jour. A. M. A.*, Oct. 16, 1915.

The experiments conducted by Meyers were on two groups of cats. In one group the right lobe of the cerebellum was removed and in the second group the left lobe. The animals were kept under observation for from one to three weeks and of all the animals he selected seven, discarding all those that did not show marked unilateral ataxia and whose wounds did not heal promptly. He is of the opinion as a result of his experiments that the function of the cerebellum is that of control and inhibition, each half exhibiting its function on the opposite half of the cerebrum. Lesions of the cerebellum do not cause sensory disturbances or disturbances of the muscular sense. The phenomena following cerebellar lesions are motor. Forced movements, circus movements, nystagmus, conjugate deviation of the eyes and the characteristic attitude of the head in some cases of cerebellar disease in man or after unilateral ablation of the cerebellum in animals are not cerebellar in origin but vestibular in origin and due either to a lesion of the vestibular complex or its oculomotor tracts.

Meyers further believes that there is an association between the cerebral hemisphere on one side and the cerebellar on the other side, the cerebellum being subservient to the cerebrum. In short, the cerebellum has no direct effect on the periphery but acts primarily on the motor cortex, the paracerebellar nuclei and perhaps also on the basal ganglia and rubral tract. Its primary effects inhibition, control and regulation of the activity of these structures. P. F.

1269

Translabyrinthine Removal of Acustic Tumors. E. SCHMIEGELOW, *Ztschr. f. Ohrenheilk.*, Bd. 73, H. 1, July, 1915.

The author gives an historical review of the development of the paracerebellar method of Krause and the translabyrinthine method of Panse. On the basis of two successful cases of his own and the similar cases of Quix and Kümmel Schmiegelow is in favor of the translabyrinthine method. Both cases, which were fibrous acustic tumors, are described. The advantages of the translabyrinthine method over the paracerebellar are that the route through the labyrinth is shorter, the entire operation is extradural and there is less danger of serious hemorrhage. Furthermore, of the four cases operated upon by the translabyrinthine method, not one patient died, whereas by the paracerebellar method the mortality is between seventy and eighty per cent. P. F.

1280

The Differential Diagnosis of Lesions of the Labyrinth and of the Cerebellum. J. G. WILSON and F. H. PIKE, *Jour. A. M. A.*, Dec. 18, 1915.

One sharp distinction between cerebellar function and labyrinthine function lies in the fact that the cerebellum is an afferent station for the propriceptive impulses and the labyrinth is a peripheral sense organ. The differentiation in lesions of the cerebellum and of the labyrinth lies essentially in the following symptoms: Nystagmus. When

the nystagmus is due to a labyrinthine lesion it consists of two phases, a slow lateral deviation, labyrinthine in origin, followed by a quick return movement cerebral in origin. The movements are synchronous in both eyes and vary indefinitely in direction with the labyrinth affected. The horizontal movement is of importance, the rotary not being of diagnostic value. The quick deviation is to the sound side. Cerebellar nystagmus is ataxic. It may be from or towards the sound side, according as we are dealing with an irritative or a destructive lesion, but with the head at rest it tends to be irregular in the plane of its direction.

Vertigo. In a labyrinthine lesion the plane of rotation of self is in the direction of the rapid phase of nystagmus. In regard to rotation of objects Wilson and Pike find it as a rule contrariwise to the preceding actual rotation. In the absence of nystagmus the apparent rotation of self is to the side of the lesion. In cerebellar vertigo the relationships are the same as in labyrinthine lesions.

Ataxia. In both cerebellar and labyrinthine lesions there is a deviation in walking to the side of the lesion if it is unilateral. But this deviation has nothing to do with ataxia. It is a disturbance of orientation in space which the patient corrects when his eyes are open; but with his eyes shut he overcorrects it and deviates to the sound side. As regards ataxia the cerebellum is the one, but not the sole, central organ which participates in the integration of impulses from the labyrinth.

Labyrinthine lesions differ from the cerebellar in (1) the presence of Romberg's sign; (2) variations in the attitude of the head influence the lack of equilibrium in labyrinthine and not in cerebellar lesions; (3) in labyrinthine disease movements of rotation or disorientation are not so readily perceived; (4) in labyrinthine disease the caloric and rotation tests are lost. P. F.

1320

Prognosis of War Deafness. LANNOIS and CHAVANNE, *Bull. de l'Acad. de Med. de Paris*, Dec. 21, 1915.

The prognosis depends upon two factors: (1) The previous condition of the auditory apparatus; (2) the existence or otherwise of a direct injury to the skull. Under the first factor the authors found that men suffering from chronic suppurative otitis media, or well-marked sclerosis, after concussion of the labyrinth from shell explosion, showed a far greater proportion of deafness or impaired hearing than healthy persons. Of 189 men sent back from the front for chronic suppurative otitis media intensified by the concussion of shell explosions, only 43 per cent were returned to the front, while 56 per cent were relegated to the auxiliary services, and 1 per cent were discharged as unfit. Of 134 cases of sclerosis sent back because of defective hearing, 48 per cent were passed into the auxiliary services, and 52 per cent were returned to the front.

Under the second factor the authors found that in about 95 per cent of cases, deafness follows traumatic mastoiditis. In from 30 to 40 per cent of cases of traumatism to the branches of the facial nerves distributed to the ear, deafness was present. In both of these cases it was generally unilateral deafness that was produced. Without any direct traumatism concussion of the labyrinth alone rarely produced deafness.

So far as treatment is concerned in definite bilateral deafness recourse must be had to lip-reading as no treatment would be of avail. On the other hand, in simple deafness, associated or not associated with dumbness, the prognosis was very good the earlier the patient was placed under treatment. P. F.

1324

A Case of Hysterical Deafness. A. M. Mott, *Medical Jour. of South Africa*, Aug., 1915.

A school girl of eighteen years, passionately devoted to music, was depressed as a result of successive disappointments at school and during a prolonged emotional crisis a fellow-pupil told her the story of a young lady who, through deafness, had to forego the pleasures of music, the theater and all the other attractions of social intercourse. The patient, as a result of her hysteria, became totally deaf, in contrast to the more usual unilateral deafness, accompanied by hemianesthesia on one side, an attitude of marked indifference to her condition and absent-mindedness.

Hypnotic and psycho-therapeutic treatment effected a complete cure. P. F.

1332

Typhoid Deafness. Rhese, *Medizinische Klinik*, Nov. 7, 1915.

Without including cases of transient deafness, Rhese states that of all the typhoid cases in his service (the exact number is not given) there was bilateral deafness in 14.9 per cent, the middle ear being intact. In 4 per cent there was otitis media with perforation, and in 1.1 per cent without perforation. The interesting point is that all the cases of deafness were bilateral. Not all the cases remained permanently deaf. Some did, while most regained their hearing in time. The onset of deafness was during the second, third or fourth week, as a rule.

The author states that vaccination against typhoid is of great importance in reducing the frequency and severity of ear complications. In the treatment of typhoid deafness, he obtained good results from mild courses of pilocarpin and also sodium idodid. P. F.

1358

Syphilitic Lesions of the Ear. J. V. F. Clay, *Jour. Ophthal., Otol. and Laryngol.*, Feb., 1915.

After considering the syphilitic manifestations of the external ear and the very indefinite symptoms of middle ear syphilis Clay takes up the question of syphilis of the internal ear and the auditory nerve. Involvement of the auditory nerve and internal ear usually occurs in the latter part of the second stage, so-called, or later, and forms one of the most frequent forms of primary disease of the aural perceptive apparatus.

Syphilis of the internal ear may be divided into three clinical types: (1) that occurrig during the secondary or tertiary periods; (2) chronic syphilitic labyrinthitis; (3) labyrinthitis of acquired syphilis secondary to chronic suppurative middle ear disease.

The acute acquired form of syphilis of the internal ear, if recognized and treated early, offers the best prognosis. Chronic constitutional laby-

rinthitis offers a less favorable prognosis. The prognosis is least favorable in the congenital type of syphilitic labyrinthitis. The value of salvarsan in syphilis of the labyrinth is unsettled. P. F.

1377

Treatment of Concussion of the Ear. O. HAMM, *Munch. med. Woch.*, No. 48, Nov. 30, 1915.

The author believes that treatment in disturbed function of the internal ear from concussion is promising. He has found otothermia of great service. His results have been such that the majority of the patients recovered their hearing and were returned to the front for further military service. It is only exceptionally that diathermia of the ear is valueless. He advises the treatments weekly. After each treatment the ear should be stopped up with cotton for 1 to 2 hours. Alcohol and especially tobacco should be absolutely prohibited. The duration of the treatment is four weeks. By the same method he has also obtained good results in chronic otitis media not yielding to any other treatment.

P. F.

1403

Lumbar Puncture in Aural and Nasal Cases; Pathology of the Fluid. W. WINGRAVE, *Jour. Laryngol., Rhinol. and Otol.*, V. XXX, p. 7, July, 1915.

The specific gravity is usually raised (1010). The alkaline reaction is always reduced in cases of infection and in some instances it may even be acid. The acidity is said to be due to lactic acid. Its presence may be demonstrated by testing with Uffelman's ????

Sugar is best tested for, mixing equal parts of a weak solution of methylene blue, liquor potassal and cerebrospinal fluid. The color disappears if the fluid is normal but remains unaffected if sugar is absent. Absence of sugar is very important evidence of bacterial infection and should be carefully looked for. The test is also applicable and useful for determining the presence of sugar in nasal discharge and in blood, but it is not applicable to urine. For spinal fluid it is preferable to Fehling's solution.

The bacteriology of the fluid should be studied by films and cultures. The former will differentiate between negative and positive groups. If positive the organisms probably belong to the "pyogen" group (streptococci, staphylococci, pneumococci [Frankel], tetracocci, tubercle, diphtheroid). If negative suspect, B. capsulatus mucosus, B. coli, B. typhosus, diplo. catarrhalis, B. pyocyaneous, B. hastilio, etc.

In chronic middle-ear cases the infection is almost always polymicrobic.

P. F.

1470

Occlusion of the Lateral Sinus as a Hemostatic Measure in Wounds Involving Large Vessels at the Base of the Brain. LANNOIS and PATEL, *Bull. de l'Acad. de Med. de Paris*, April 27, 1915.

In wounds involving large vessels at the base of the brain the danger from secondary hemorrhage is very great, resulting either in prompt death or in the formation of a diffuse hematoma. In two cases where

ligation of the carotid was done death resulted within a week through rupture of the internal jugular vein. In five other cases, however, occlusion of the lateral sinus was followed by recovery, the control of the hemorrhage being immediate. The packing introduced to compress the sinus was left in for twelve days. P. F.

1521

Studies in the Localization of Cerebellar Tumors: Posterior New Growths Without Nystagmus. E. G. GREY, *Journ. A. M. A.*, Oct. 16, 1915.

Nystagmus is recognized as a most important localizing sign in diseases of the posterior cranial fossa, especially lesions of the cerebellum, cerebellar peduncles, vestibular nerves, the neighboring nuclei and labyrinths. When nystagmus occurs in a patient showing symptoms of subtentorial tumor the presence of either an extracerebellar or an intracerebellar neoplasm is probable. Nystagmus may, however, be absent or it may be found in patients with tumors lying anterior to the cerebellum, which fact has somewhat restricted its usefulness as a sign of disease in the posterior fossa. The type of nystagmus in patients with tumor anterior to the cerebellum and in those with cerebellar or extracerebellar growths is occasionally identical.

Grey enters into a discussion of the mechanism of nystagmus. According to Bauer and Leidler, nystagmus is the result of lesions in the region of Deiters' nucleus. The horizontal jerks originate more from the ventrocaudal part, the vertical jerks from the oral part. Barany also assumes the existence of a nystagmus center in this region, the nystagmus being caused by increased tension in the posterior fossa. The presence of a nystagmus center is contested by Wilson and Pike, who believe that an agency somewhere produces a deviation of the eyes from the primary position of equilibrium. In labyrinthine nystagmus this agency lies in the labyrinth, but what agencies are responsible for the development of nystagmus from other portions of the brain we do not know, and just what relation the cerebellum bears to the development of rhythmic movements of the eyes is at present rather uncertain. Destruction of parts of the cerebellar hemisphere and vermis never causes spontaneous nystagmus, yet it causes excessive excitability of the vestibular nuclei. This has led to the view that in cerebellar disease the nystagmus is due to an alteration in function of the vestibular nuclei or their connections with the nuclei of the eye muscles through pressure.

Grey's discussion deals with 34 verified cases of intracerebellar tumor, in one-third of which there was no nystagmus, and with 40 verified cases of tumor situated anterior to cerebellum, in eight of which there was nystagmus previous to operation. In both groups, however, the same degree of intracranial pressure was found. All the cases in which nystagmus was absent contained intracerebellar new growths, which suggests that in the presence of a cerebellar tumor syndrome, but without nystagmus, the absence of this symptom points towards an intracerebellar localization of the lesion.

Caloric tests made in six of the 32, and seven of the 40 cases showing the absence of nystagmus resulted in characteristic nystagmus from either labyrinth. P. F.

1524

Bilateral Lesion of the Auditory Centre. THOMAS GUTHRIE, *Jour. Laryngol., Rhinol. and Otol.*, Vol. XXX, No. 5, May, 1915.

The author considers the features of six previously reported cases (Mott, Benninghaus, Kahler and Pick, Mills, Wernicke and Friedländer, Pick) and places a seventh on record. This patient, male, twenty-two years of age, suffered complete deafness following an attack of apoplexy. Except for the deafness, which remained, he subsequently recovered completely. Lesion of the labyrinth or eighth nerve was excluded by the fact that while the cochlear functions were abolished the vestibular reactions were normal. The presumption that the deafness is of central origin is very strong, although autopsy findings are absent in this case to confirm this view. The special feature in this case, not present in the other cases on record, is the association of complete and permanent deafness with perfect recovery of all other functions. P. F.

1525

Tuberculoma of the Pons Varolii. L. GUTHRIE, *British Jour. Child. Dis.*, V. 12, No. 140, Aug., 1915.

The following symptoms were present: Hearing not affected. Tongue protruded straight; soft palate moved normally. When patient was sitting up the chin constantly deviated to the left and head inclined towards the left. Eyes negative. Complete sixth nerve paralysis; no outward movement beyond midline. Complete paralysis of left side of face. No weakness, hypotonia, tremors, ataxia or increase in reflexes in upper extremity. Same in regard to lower extremities; active knee-jerk on right side. No ankle clonus. Plantar reflexes sluggish. Slight vertical nystagmus. Death from convulsions. Section: tuberculous mass about one inch in diameter in center of the pons, much more diffused, histologically, than the gross appearance indicated. Several metastatic foci beneath cortex on frontal lobes and one on cribriform plate of ethmoid. P. F.

1528

A Rare Case of Cerebellar Abscess. B. HASELTINE, *Jour. Ophthal., Otol. and Laryngol.*, Aug., 1915.

The interest attached to this case lies in its being a bilateral cerebellar abscess, with recovery. A review of the history is as follows: Patient, a young man of 18 years. It began with an acute purulent rhinitis. The patient had previously never had any ear trouble or infections of any kind. Soon after the infection started he developed a middle ear infection with spontaneous rupture of the right drumhead and a profuse purulent discharge from the right ear. At this time the temperature was 98 degrees, pulse 92; the patient complained of vertigo, with a tendency to fall to the right side, which tendency remained throughout the illness, dilated pupils, with no reaction to light, occasional vomiting. About ten days later there developed paralysis of the right arm and leg, subnormal temperature and slow pulse (54-66). There was slight choked disc on each side. Hearing was normal. Examination of the spinal fluid showed fifteen lymphocytes per c.mm.; no red blood cells, no polymorphonuclears. No growth culturally. Nonné test (both phases), negative; Noguchi glob-

ulin test, negative. The mastoid had been entirely negative. The middle ear had become normal.

Simple mastoid operation performed. Cells were not broken down and no pus present. Cells were distinctly darkened and softened. Culture showed staphylococcus aureus. The labyrinth was exposed but not opened. The dura over the cerebellum in Trautmann's triangle was exposed and found normal in appearance. Mastoid cells were thoroughly cleaned out.

The immediate results of this operation were very good; the temperature returned to normal, the rotary nystagmus, which had been marked, disappeared in forty-eight hours; no vomiting; lessening of the pupillary dilatation.

On the seventh day after operation there was a recurrence of the cerebellar symptoms (interference with muscular co-ordination) with recurrent vomiting.

Mastoid wound re-opened and explored. Also the right temporosphenoidal lobe which, however, was normal. Trephined over the cerebellum and large cerebellar abscess uncovered. Immediate amelioration of the symptoms. Six days later, patient suddenly grew worse. X-ray taken, which showed extension of the abscess into the left cerebellar hemisphere. Left abscess was drained through the right opening. Culture showed staphylococus aureus. Recovery. P. F.

1547

Fracture of the Base of the Skull with Escape of Cerebrospinal fluid from the Ear. The Effect of Atropine and Epinephrin Upon the Secretion. J. WALKER MOORE, *American Journal of the Medical Sciences*, Vol. CXLIX, No. 4, page 380, April, 1915.

Reports a case, which resulted fatally. A careful autopsy was made and the cerebral findings, both gross and microscopic, are given. The evolution of the hypothesis that the cerebrospinal fluid is a true secretion is given, and the literature of the subject quite fully summarized. Then follows a series of tables, based upon the author's case, giving the quantity and composition of the cerebrospinal fluid at stated periods, showing the results from the administration of doses of atropine and epinephrin, and accompanied by remarks on the clinical condition of the child at the time of observation. PACKARD.

1548

Diagnosis of Tumor in Cerebello-Pontine Angle. G. H. M. KROHN, *Norsk. Mag. for Laegevid.*, V. 76, No. 6, June, 1915.

The symptoms complained of by the patient, a woman of 25 years of age, were headache, occasional choked disc, vomiting, nystagmus and the cerebellar speech and gait. There were also paralysis of the fifth, sixth, seventh, eighth nerves on the same side as the tumor, hypotomy, asynergy, adiadokokinesia, catalepsy, deviation and inability to draw parallel lines between two vertical lines (dysmetria). There were hemiparesis, hemianesthesia and positive Babinski on the opposite side. P. F.

1550

Case of Temporosphenoidal Abscess Discovered by Exploration Through Multiple Incisions in the Dura; Remarks on Operative Technique. J. R. PAGE, *Surg., Gyn. and Obst.*, p. 718, June, 1915.

The author believes that the danger of infection from without as a result of small incisions in the dura, contiguous to the mastoid wound, is comparatively slight. The wound should, however, be thoroughly curetted and every crevice packed with gauze saturated with a strongly antiseptic solution before the dura is even uncovered. Freshly uncovered dura is sterile, but even if it be momentarily contaminated by the surgeon's gloves or instruments, the contamination does not have time to become established as an infection on its surface, and before an incision is made, gloves, instruments and sponges should be changed and the recently exposed dura is washed off with an antiseptic solution (alcohol) followed by saline.

Where granulations cover the dura from prolonged epidural infection experience has shown that the meninges beneath such an area are more resistant, because of the adhesion, to infection, even though antiseptics cannot reach all the bacteria infiltrated in the granulations. The advantage of small multiple incisions is that the whole wound can be left open to allow free access to the area for drainage without incurring the danger of hernia-formation or the necessity of closely suturing the wound for the same reason, which not only interferes with proper drainage but increases the danger, through exposure of a large area of cortex, to meningeal infection from within as well as from without. P. F.

1555

Intracranial Telangiectasis: Symptomatology and Treatment, with Report of Two Cases. ERNEST SACHS, *Amer. Jour. Med. Sc.*, Oct., 1915.

The clinical picture of intracranial telangiectasis consists of (1) attacks of Jacksonian epilepsy occurring in no-syphilitic persons at long intervals; (2) unconsciousness of long duration; (3) no evidence of increased intracranial pressure; (4) a very slow progression of symptoms; (5) telangiectases on the head or face.

Two typical cases, each in a boy ten years old, are reported by the author, who emphasizes that it is essential to distinguish between a true angioma—a neoplasm—and the telangiectasis observed in these cases which was congenital and not a neoplasm. P. F.

1571

Diagnosis of Tumors in the Posterior Cranial Fossa. T. H. WEISENBURG and P. WORK, *Jour. A. M. A.*, Oct. 16, 1915.

The authors believe that the chief function of the cerebellum is to synergize all movements of the body. All other symptoms in addition to the cerebellar must be taken into consideration to accurately diagnose a cerebellar lesion. They have often made a diagnosis of labyrinthine lesion only to find the cerebellum involved, and vice versa. According to the authors, lesions of the cerebellum itself cause more strictly limited symptoms than those invading the peduncles. Most cerebellar tumors are gliomatous and tend to involve the middle rather than the outer part

of the cerebellum; the vermis is practically always involved. Here are centered the synergic movements of the upper trunk and in the lower vermis the movements of the lower trunk. When the vermis is involved the staggering is mainly forward or backward; when a lateral lobe is involved the sway of the body is to the side of the lesion. When the lateral lobes alone are involved the asynergic movements are present only on the side of the lesion in the upper limb if the superior lobe is involved and in the lower limb if the inferior lobe is involved. If nystagmus is developed by voluntary movement the lesion is probably extracerebellar and the presence of cranial nerve symptoms also indicates that the lesion is extracerebellar. Vertigo associated with auditory disturbance is not a cerebellar symptom. It is supposed that the inferior and middle peduncles transmit impulses to the cerebellum and the superior peduncle transmits impulses from the cerebellum. It is probable, however, that the peduncles transmit impulses in both directions. In lesions of the middle cerebellar peduncle the symptoms consist of fifth or sixth nerve disturbance on the same side as the lesion with sensory and motor symptoms on the opposite side. In lesions of the inferior peduncle (the authors state that they have never seen a tumor limited to this peduncle, though they have seen extensions of growth into one or both), the associated symptoms, if the lesion extends into the medulla, show involvement of the vestibular tract and of the ninth, tenth and twelfth cranial nerves. If in addition to cranial nerve symptoms there is cerebellar asynergy in the trunk and limbs it is probable that the tumor grows either from the cerebellum or from the pons. P. F.

1633

A New Tonsil-Holding Forceps. S. C. GLIDDEN, *Surg., Gyn. and Obstet.*, Nov., 1915.

The teeth in this instrument are similar to those in a vulsellum forceps. The opening between the teeth is 1⅛ inches, allowing the tonsil to be firmly grasped either longitudinally or transversely. The handle is at an acute angle, with a lock at the end of it. The handle is small enough to allow a snare to be slipped over it without removing the forceps after the tonsil is grasped. P. F.

1635

A New Tongue Depressor Designed to Facilitate the Sluder Method of Operation. JAMES, H. HEACOCK, *New York Medical Journal*, Dec. 18, 1915.

A new instrument designed to fit on the index finger and used as a tongue depressor, allowing more space to work. PACKARD.

1644

A Pharyngeal Tube Combining Rebreathing and Insufflation. F. W. PINNES, *Jour. A. M. A.*, Oct. 9, 1915.

It is a one-piece metal blade with upturned sides to fit the contour of the tongue, having a channel for introduction of an oral catheter five inches long. It is curved from the lips to the pharynx, the mouth end being a flattened tube and adjustable for different sized patients. Its ad-

vantages are (1) it provides for automatic holding of the tongue forward without other means; (2) it has not the objections of a closed tube, being an open blade with channels easily cleaned; (3) it can be used in patients of different sizes; (4) it has a channel for introduction of an oral catheter for pharyngeal insufflation, the catheter not being part of the pharyngeal tube; (5) the anesthetic may be stopped while the blade remains in place; (6) it is efficient in holding the tongue forward; (7) it is efficient for rebreathing, keeping the teeth and lips apart and the tongue forward; (8) it does not get clogged with mucus or blood. P. F.

1648

Accessory Sinus Angle Finder. F. M. Law, *Amer. Jour. Roentgenol.*, Nov., 1915.

In order to obtain a satisfactory anteroposterior image of all the accessory sinuses at one exposure it is necessary that the rays pass through the head at a certain angle. The proper angle is one which will cause the shadow of the petrous to cut across the lower one-third of the orbit. To obtain this position the principal ray must be directed at an angle of 23 degrees from a line extending from the external auditory meatus to the glabella. The instrument described by the author is a means of finding this angle. He describes the technic of using it. P. F.

1720

Combined Extracranial Paralysis of Cerebral Nerves. J. C. Beck and G. B. Hassin, *Medical Record*, Aug. 21, 1915.

The patient was an 18-year-old girl and presented the following symptoms: (1) Pain in the neck, occiput and forehead; (2) marked hemiatrophy of the tongue; (3) a combination of tongue atrophy with paralysis of the ninth, tenth and eleventh cranial nerves; (4) nystagmus. The eighth nerve was also involved, the involvement being bilateral and the deafness was due to otosclerosis. The patient's mother and two sisters also suffer from deafness due to some pathological cause. The nystagmus was marked only during active movements of the eyeballs and latterly showed slow oscillatory movements to the left or right, according to the direction of the intentional movements of the eyes, without the quick return to the opposite, which is, according to Wilson and Pike, the only essential movement of a so-called labyrinthine nystagmus. The question arises if, in view of the presence of otosclerosis, this nystagmus in this patient was not of vestibular origin. The essential trouble of the patient was tuberculosis of the cervical glands with secondary involvement of the ninth, tenth, eleventh and twelfth nerves in their extracranial course. The authors believe that in this case the nystagmus and deafness are independent lesions. The diagnosis was verified by x-ray examination, successful operation and subsequent progressive improvement. P. F.

1810

Calcium Factor in Hemophilia. O. F. Hess, *Bull. Johns Hopkins Hosp.*, Nov., 1915.

Typical hereditary hemophilia is not associated with calcium deficiency. The author's studies show that the addition of calcium to blood *in vitro*

delays rather than hastens coagulation, yet quantitative studies of the lime content of the patient's blood (a boy nine years old) showed that there was a deficiency compared with the normal, which became positive when lime salts were added to the diet. This particular case seemed to be a type of *hemophilia calcipriva*. P. F.

1839

Use of Pituitary Extract as a Coagulant in Nose and Throat Surgery... H. KAHN and L. E. GORDON, *Jour. A. M. A.*, Jan. 23, 1915.

To control hemorrhage in nose and throat surgery the dose is twelve minims in children, and fifteen minims in adults. This is administered hyperdermically not less than fifteen minutes before anesthesia. The authors have employed pituitary extract in this matter in over one hundred cases and they find that the coagulation time of the blood is considerably reduced as well as the hemorrhage, following turbinal operations especially. Systolic pressure was increased in 55.31 per cent of cases, reduced in 36 per cent and unchanged in 8.5 per cent. Diastolic pressure was increased in 35.5 per cent of the cases, reduced in 35.5 per cent, and no change in 29 per cent. P. F.

1928

Some Ocular Complications of Mumps. F. RAMOND and G. GOUBERT, *Bull. et mem. Soc. Med. des Hop. de Paris*, July 29, 1915.

The authors record some little known ocular complication of mumps met with by them in a military hospital. Out of 115 cases of mumps lacrimation was present in 45, affecting chiefly the bulbar conjunctiva. In one case dacryoadenitis was present. Of 16 cases in which the fundus was examined some showed a markedly increased rosy color of the optic disc; others showed a softness of the disc with disappearance of its contour; others showed swelling of the veins of the retina, and one case showed a congested iris. Another case showed papillary stasis. All the with the disappearance of the inflammation of the parotid gland. In a few instances they persisted for a month after recovery from the mumps. P. F.

1945

Oto-laryngological Cases from a Military Hospital. ARCHER RYLAND, *Jour. Laryngol., Rhinol. and Otol.*, V. 30, No. 8, p. 304, Aug., 1915.

Case 1. Pan-sinusitis of long standing treated by radical operation on affected sinuses.

Complaint: nasal obstruction on both sides; foul discharge from both sides of nose and impairment of sense of smell. Left deviation of septum and basal spur on right. Large polypi in left nasal fossa, which were removed. The following operations were performed in the order named: (1) Caldwell-Luc on left maxillary antrum, which had been lavaged daily for three weeks previously without cessation of pus formation. (2) Ethmoid and fronto-ethmoidal curettage. (3) Luc's operation on left frontal sinus. (4) Exposure of sphenoid and removal of neighboring diseased mucosa.

The total treatment extended over a period of ten weeks. Accessory sinuses free from pus. Patient returned to military duty.

Case 2. Suppurative otitis media; acute mastoiditis and labyrinthitis. Patient, 24 years old, had a left chronic otitis media. Acute mastoiditis supervened, followed a few days later by acute labyrinthitis. Operation decided upon by increase of mastoid tenderness, increase of vertigo and persistence of nystagmus and vomiting. Radical mastoid performed. No fistula present and no operative measure on labyrinth. Vertigo and vomiting ceased within forty-eight hours after operation. Uneventful recovery.

Case 3. Severe self-inflicted wound of the larynx; primary suture; tracheotomy; recovery.

Recovery without pulmonary complications, hemorrhage or interference with laryngeal movements. P. F.

1975

Acute Actinomycosis of the Parotid Gland. E. D. TELFORD, *Brit. Med. Jour.*, Oct. 9, 1915.

Two cases are reported by Telford in which there was remarkable similarity in onset and symptoms. In each case the route of infection was by the parotid duct and from this point of entry the disease rapidly infiltrated the gland itself. In one case the infection was derived, it would seem, from the habit of chewing corn whilst engaged in feeding poultry. In the other case no exact source of infection could be discovered except that a week before the onset the patient had played in a ripe field of corn.

The features of acute actinomycosis would appear to be as follows: The fungus enters by the parotid duct and within a few days gives rise to an acute parotitis. The disease then bursts through the limits of the gland, followed by acute cellulitis involving the neck and even extending far over the scalp. Symptoms of constitutional sepsis are marked. Should the swollen parts be incised no pus will flow, but merely a bloody debris and the cut tissue will be found to be diffusely infiltrated and of a dirty gray color, flecked with yellow.

In treatment, iodin has appeared to yield good results in the more chronic cases and should be used freely in the acute cases. The internal administration of K1 should be pushed freely. The incisions and sinuses should be irrigated with a weak mixture of tincture of iodin and water. In the author's second case 0.3 grams of neo-salvarsan was given as soon as the diagnosis was established on the twelfth day of the illness. Within twenty-four hours there was a marked increase in the amount of discharge and a rapid improvement in the local and general condition.

P. F.

2011

Oral Surgery. A Treatise on the Diseases, Injuries and Malformations of the Mouth and Associated Parts. DR. TRUMAN W. BROPHY, Philadelphia and London: P. Blakiston's Son & Co., 1915.

That this book by Dr. Brophy is an exhaustive work goes without saying. As can readily be understood the best chapters are those on hare-lip and cleft-palate. The latter comprises 162 pages and the detailed description of operative technic and the instructive plates and drawings elucidating the operative procedure makes this feature of the book a

masterpiece. Either chapter is well worth the price of the book, for we have here a presentation of the author's extensive experience in a field where he is pre-eminent. The honors are shared also by the splendid chapters on the embryology, development and disease of the tongue, fracture of the jaw and the bones of the face, maxillary and mandibular tumors, cysts, dentoalveolitis and infections of oral origin.

On perusal of the work, however, the impression becomes evident that it suffers from some duplication of subject-matter and that a good deal might have been omitted without deflecting from the value of the book as a whole. This applies especially to the chapters on blood examination, eugenics and infant feeding. The book does not contain a chapter on Roentgenography of the skull—which would be perfectly *apropos*—notwithstanding that numerous skiagraphs are scattered throughout the book. The chapter on eugenics merely points out the congenitality of hare-lip and cleft-palate, facts refrred to under their respective hads, so that this chapter could have been omitted. Why the book should include discussions on wet-nurses, formulae for infant feeding, baby's stools and other encroachments on the province of pediatrics is not clear, especially as the author, Dr. F. W. Belknap, states at the outset "the various means of introducing food into the stomach of a child with a cleft-palate have been described in another chapter." Why not go a step further and consider the infectious diseases that a cleft-palate child, like any normal child, is likely to have? The chapter on general syphilis is quite unnecessary, too, because syphilis in the mouth and associated parts is taken up under the respective heads.

But these are faults which may be remedied and which will not prevent the book from becoming one of the standards of medical literature. Finally, the 39 colored plates and the 909 photographs and other illustrations are excellent products on which the publishers deserve to be complimented. P. F.

2017

Anesthetics. Their Use and Administration. Dr. Dudley Wilmot Buxton, Philadelphia and London: P. Blakiston's Son & Co., 1915.

The scope of the book may best be comprehended by an outline of its chapters, of which there are twelve. Chapter I deals with the historical aspects of anesthetics. Chapter II, preparation for operation; selection of the anesthetic and method. Chapter III, nitrous oxid gas. Chapter IV, ether—hedonal. Chapter V, chloroform. Chapter VI, ethyl chlorid and its mixtures—ethyl bromid and the less commonly used anesthetics. Chapter VII, alkaloidal drugs with general anesthetics or with local analgesics; anesthetic mixtures, successions, and solution. Chapter VIII, anesthetics and analgesics in special surgery. Chapter IX, anesthetics in obstetric practice. Chapter X, the accidents and after effects of anesthesia and their treatment. Chapter XI, local analgesia—spinal analgesia. Chapter XII, medico-legal aspects of the administration of anesthetics.

It is thus seen that the consideration of the subject of anesthetics has been carried out from every angle. The views expressed by the author on the debatable problems in anesthesia will be found to be the result of mature judgment and wide experience. The book cannot be too highly recommended, especially to those who are primarily interested in the subject of anesthesia. P. F.

2019

Diseases of the Nose and Throat. Dr. Algernon Coolidge, Philadelphia and London: W. B. Saunders Co., 1915.

The evident purpose of the author was not to write a reference volume covering the diseases and surgery of the nose and throat, but a comprehensive introduction to the subject for the use of students. This purpose Dr. Coolidge has amply fulfilled for the characteristic feature of the book is its simple presentation of the subject, devoid of involved references and academic discussions so that the student just beginning the study of rhinology and laryngology is able to get a very comprehensive understanding of the subject, which he can amplify later if he should decide to go into these branches of medicine more extensively. The simplicity of the book is even noticeable in the illustrations, which are clear-cut drawings showing the relations of parts very distinctly and for the purpose in view are surely to be preferred to expensive plates and photographs of pathological specimens which at times utterly fail to give the reader a clear idea of what they are supposed to show. In view of the excellent presentation of the subject the book should have a wide circulation.

P. F.

2021

The Nose, Throat and Ear; Their Functions and Diseases. A Treatise Upon the Breath-road, Food-road and Accessory Organs. Dr. Ben Clark Gile, Philadelphia and London: P. Blakiston's Son & Co., 1915.

For teaching purposes as well as for the general practitioner Dr. Giles' book will be found very useful. Of the smaller works on oto-laryngology it has originality and is perhaps one of the best arranged. The subject-matter in each chapter is very completely considered. Operative measures are not neglected or dismissed in a short paragraph. The operation for tonsil enucleation by snare, the mastoid operation, the intranasal opening of the frontal sinus, etc., are all very fully described. The book also contains a short but comprehensive chapter on otosclerosis and another on intracranial complications from ear disease. The illustrations are good.

P. F.

2027

Diseases of the Throat, Nose and Ear. Dr. William H. Kelson, Oxford University Press, 1915.

For the purposes of the medical student this manual by Dr. Kelson will be found quite sufficient. The subjects are treated concisely but not to the sacrifice of clearness. The description of the tonsil operation might have been carried out with greater detail and the technic brought up to more modern standards. The operation as described deals more with tonsillotomy by the Mackenzie guillotine, the author mentioning his preference for enucleation by snare, in a *sotto voce* fashion only. The best chapter is that on the ear. The mastoid operations are referred to merely in their general indications. The functional tests for hearing are discussed quite sufficiently so that the student should be able to obtain a very comprehensive idea of their significance. The book also contains an appendix on general therapy including the use of electricity, x-rays, radium and vacines in oto-laryngology.

P. F.

2035

Injuries to the Eyes, Nose, Throat and Ears. Major Andrew M. Ramsay, Major J. Dundas Grant, Capt. H. Lawson Whale and Capt. Charles E. West, Oxford War Primers, New York: Oxford University Press, 1915.

The chapter on injuries of the eyes is treated by Dr. Andrew M. Ramsay; the chapter on nose and throat by Dr. J. Dundas Grant and Dr. H. Lawson Whale and the chapter on the ear by Dr. Charles E. West. The book covers only 156 pages, but it is replete with information dealing largely, of course, with wounds of the head which directly or indirectly invoive the speciti sense organs. It is evident that the authors have had wide experience in the military aspects of the surgery of these parts and the little book is written exactly from that point of view and for medical men contemplating military service. A chapter consisting of thirty-eight illustrative cases is included, together with x-ray plates of the findings, a statement as to the operation performed and the results of same. The chapter on injuries of the ears might have been enlarged. One statement particularly by Dr. West is worthy of repitition: "It is remarkable with what completeness the possession of an antecedent middle-ear deafness seems to screen the labyrinth from damage by explosion." The value of this observation on the medical observation of recruits, as far as the ear is concerned, is quite evident. P. F.

2045

Squint: Its Causes, Pathology and Treatment. Dr. Claud Worth, London: John Bale, Sons and Danielsson, 1915.

The fact that a fourth edition of this work has been found necessary speaks for itself. This edition does not differ materially from the preceding editions. What is especially characteristic of the book is the thoroughness with which the subject is considered, the easy flowing style of language, and the frequent references to the author's personal experiences and methods of treatment including operative technic. As a work of authority on the subject of squint, Dr. Worth's book will continue to hold first place. P. F.

2046

What the Mother of a Deaf Child Ought to Know. Prof. John Dutton Wright, New York: Frederick A. Stokes Company, 1915.

As an educator of a quarter of a century's experience, Prof. John Dutton Wright can speak authoritatively of the duties of the mother of the deaf child and as a man interested in the humanitarian aspects of the deaf child's education he puts his appeal for the co-operation of mothers in a most interesting and helpful style. The book will appeal especially to the average busy mother who wishes to know what hopes and possibilities can be counted on for her little deaf child and how she can best use the time at her disposal in laying the foundations for the child's oral education. She willlearn in these chapters, in language devoid of all technicality, just what she is to do to help efface the handicap of deafness, and affliction which she sees will make her deaf child different from others unless it is offset. She will learn the value of beginning to talk

to the deaf child, to train his eye to take the place of his ear as far as possible, and how to encourage his efforts at imitating speech so that his vocal organs will not become stiffened through inaction.

Dr. Wright's book should have even a wider appeal to friends of deaf children, to social workers, physicians, teachers and others who come in contact with these unfortunates. The child whose mother has intelligently assimilated the contents of this little volume and acted upon its practical and valuable suggestions, and whose friends have adopted the habit of talking to the child and treating him like other children, will enter a regular oral school for the deaf, with the immeasurable advantage of having the ground already prepared for the work of the teached. It is certainly to be hoped that "What the Mother of a Deaf Child Ought to Know" will find its way into every home where a deaf child is living.

ETHEL M. HILLIARD.